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FLORA OF OXFORDSHIRE

BEING A

TOPOGRAPHICAL AND HISTORICAL ACCOUNT

OF THE

FLOWERING PLANTS AND FERNS

FOUND IN THE COUNTY

WITH SKETCHES OF

THE PROGRESS OF OXFORDSHIRE BOTANY

DURING THE LAST THREE CENTURIES

BY

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PREFACE.

THE object of this work is to give a complete and accurate list of the plants which have at any time been recorded as growing in Oxfordshire, either in a naturalised or more or less wild condition; to trace the history of their discovery, and to give the special localities where they have occurred. Many of these records are from the valuable collections in the Botanical Garden, or from rare books, and in some cases from MS. notes in copies of old works on Botany.

It is now fifty years since Walker's 'Flora of Oxfordshire' appeared, and although this was published nearly half a century after Sibthorp's 'Flora Oxoniensis,' the additions made were not numerous, nor was plant distribution traced out with any degree of completeness. Since the time when it appeared such strides have been made in the knowledge of the structure, classification, and distribution of our wild flowers, that a general Flora of the County was much needed.

Shortly after taking up my abode in Oxford, the MS. notes which Mr. Alfred French, an employé of the British Museum, had made with an idea of compiling a Flora of Oxfordshire came (through his premature death) into my possession. Professor Lawson decided not to go on with the work, and at the request of the Director of the Botanical Department of the British Museum I undertook to do so. It will be well

to explain here what portion of the Flora is French's work—first, he had copied out all the localities in Sibthorp's and Walker's Floras, and Gulliver's and Beesley's Banbury Lists, and all the Oxford references in the three editions of Ray's Synopsis, in the Old and New Botanist's Guide, the Phytologist, and the Journal of Botany. Secondly, the Oxford plants in the Herbaria of the British Museum and the Pharmaceutical Society, and in two or three private Herbaria had been noted. Thirdly, he had included all his own records.

In this Flora, all French's personal records will be quoted with his name attached, but, for the sake of brevity, the records in the first and second sections will not be so distinguished; the reader, it is trusted, will bear in mind that these records are quoted through French. I have merely checked and if necessary corrected them. The foregoing will show in what way, and to what degree I am indebted to his MSS.

This Flora will enumerate about 400 species and varieties not mentioned in Sibthorp's or Walker's Floras, a large proportion of these, it is scarcely necessary to say, being plants of casual occurrence.

For allowing me to search the Herbaria preserved in the Oxford Botanical Garden, I must tender my sincerest thanks to the Professor and Curators; the Library, rich in the Botanical works of the 16th and 17th centuries, was also most kindly rendered accessible. To the Keepers of the Radcliffe, Bodleian, and Merton Libraries I am also indebted. Mr. W. H. Baxter places me under obligation by his permission to consult the Herbarium and MSS. (now incorporated in the University collection) of his father, Mr. W. Baxter. To Mr. H. Boswell I owe many thanks for an extensive set of notes on local Botany and for his Moss Flora, and to Miss Beatrice Taylor for a large list of Fungi. Valuable aid has also been rendered by Mr. Thos. Beesley, Mr. H. E. Garnsey,

Mr. F. T. Richards, Mr. Bolton King, Rev. F. Bennett, Rev. E. Fox, Mr. H. Ridley, Mr. F. Arnold Lees, and Mr. J. Bagnall.

The Rev. W. W. Newbould, Mr. J. G. Baker, Mr. Arth. Bennett, and Mr. J. Britten have given advice and assistance with characteristic generosity.

The Rev. F. Bennett and Mr. H. Boswell kindly assisted in revising the proof sheets.

In the absence of plates (which would have caused too great an expense), I would point out to residents in Oxford that on the reference shelves in the Camera is Syme's 'English Botany,' which gives figures of almost all the plants referred to. When such is the case, the volume, page and plate, are quoted in the Flora. Unfortunately I was unable to check these numbers until the book was nearly through the press, so that several numbers require correction. These are given in the list of errata.

I can only express my wish that the compilation of this work had been entrusted to abler hands, and to one with more leisure at command, but no pains have been spared in consulting the Botanical literature of the last three centuries in search of Oxford references, or during more congenial hours (snatched from an engrossing business) in completing the task of visiting the 300 parishes of the county, to get together records of plant distribution which, imperfect though they may be in themselves, may yet serve as a framework for a more worthy structure. I trust that although errors must have crept in, that they are not sufficiently numerous to materially affect the accuracy of the work.

My labour will be quite repaid if Botany be recruited by a single disciple, or if to one of the many brain workers of this intellectual centre it may suggest the healthful and restorative influences exerted by a botanical walk through the lovely woods of the chalk downs, or in the more prosaic but

still interesting and varied country by which Oxford is immediately surrounded.

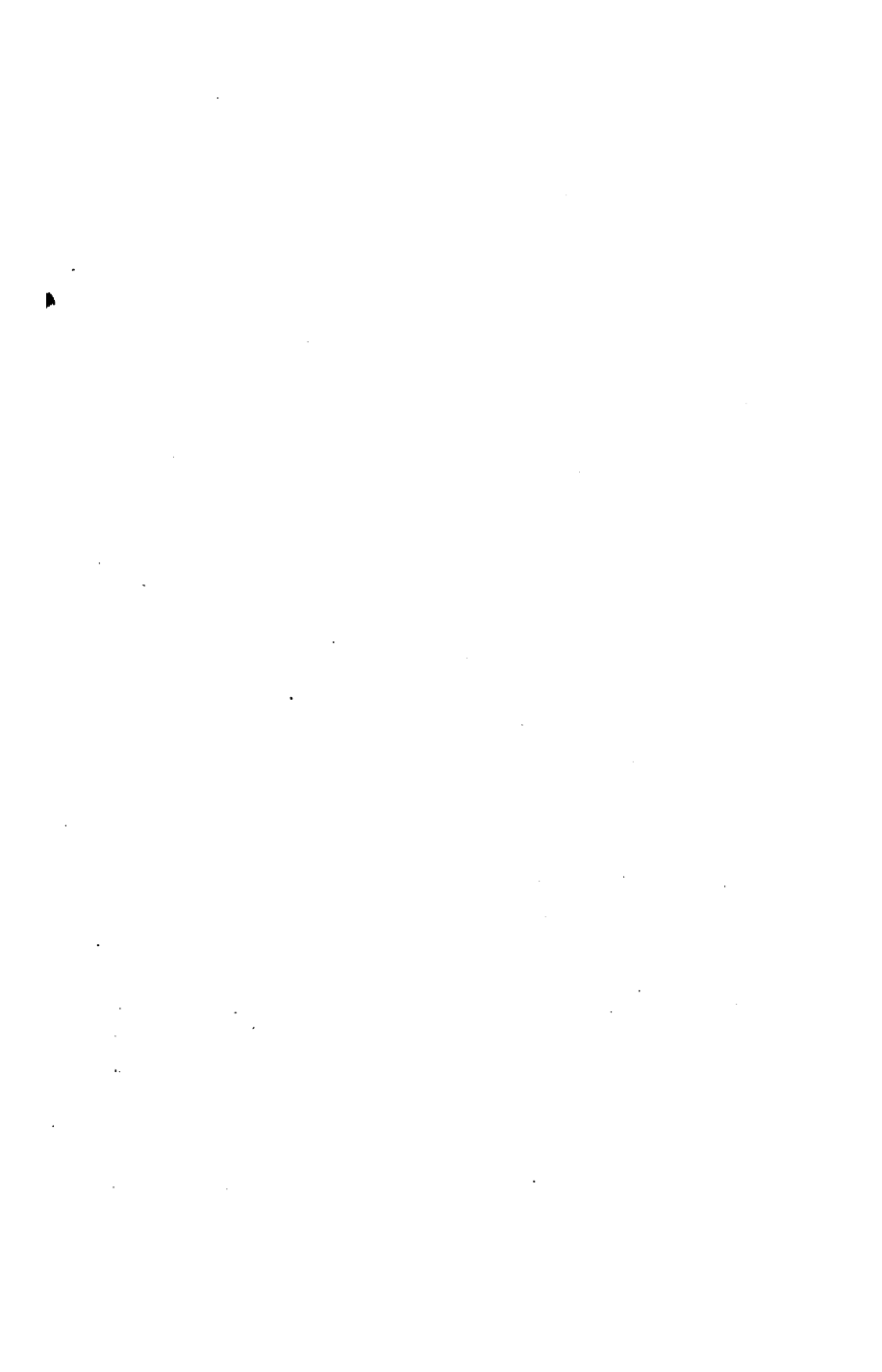
GEORGE CLARIDGE DRUCE.

VENICE,
April 22, 1886.

Additional notes to the County Flora will be always welcomed. They may be sent to the Author, 118 High Street, Oxford.

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FLORA OF OXFORDSHIRE.

INTRODUCTION.

TOPOGRAPHY.

Oxfordshire or Oxon lies between $51^{\circ} 28'$ and $52^{\circ} 13'$ N. lat., $0^{\circ} 50'$ and $1^{\circ} 43'$ W. long., in the centre of England, being entirely inland. It is bounded on the north by Warwickshire and Northamptonshire, on the east by Buckinghamshire, on the west by Gloucestershire and on the south by Berkshire. Its length is about 50 miles and its breadth varies from 7 to 28 miles. It is very irregular in outline, being in the centre only about 7 miles across and in the southern part nowhere more than 12 miles wide. It contains 14 hundreds, a city, 12 market-towns and about 280 parishes. Its area is about 470,000 acres, the northern portion containing about 320,000, and the southern 150,000 acres. The county consists roughly of three distinctions of soil, so well marked by nature as to allow of little doubt respecting them.

(1) *The Red Land* of the Northern district, which amounts to about 80,000 acres, and reaches from Banbury to within 3 miles of Chipping Norton. It includes also the parishes of Hook Norton, Little Rollright, Tadmarton, Hanwell, Bloxham, and Milcomb. This is a rich and fertile district, and from an agricultural point of view may be considered the glory of the county. The soil is rich, deep, sound, and friable, and is adapted to a most varied cultivation.

(2) *The Stonebrash*, of about 164,000 acres, begins on the border of Gloucestershire at Broughton Poggs and Black Bourton, extends thence to Brize Norton, Witney, Woodstock;

omits Bletchington but includes Chesterton, Bicester and Twyford, and steers north by Shelswell, takes in part of Mixbury and then pursues a south-west direction, including in its boundary Cottisford, Fritwell, part of Somerton and North Aston, omits Duns Tew and part of Westcote Barton, includes Church Enstone, leaves out Sandford, and passes between Little Tew and Heythrop to Swerford, then takes in Great Rollright, and touches the Warwickshire boundary at Little Rollright.

(3) *The Chiltern district*, about 65,000 acres in extent. This district extends from Chinnor to the valley of the Thames, and southwards to the county boundary. The basis of this tract of country is chalk, in some places very white. The chalk is covered to various depths with Tertiary deposits forming a sound, dry loam, well adapted to the beech woods with which so large a portion of its surface is covered. Sainfoin is also a peculiar product of the district. Flints abound even on some of its best soils. The White Mustard takes the place of Charlock as a weed in the corn-fields.

In *The Agricultural Returns* for 1881 and 1882 Oxfordshire is stated to contain 470,095 acres. Under crops, bare fallow and grass, in 1881, 417,677 acres; in 1882, 417,606 acres.

Corn Crops.

	1881.	1882.
Wheat	55,193	59,417
Barley	51,856	47,808
Oats	31,091	28,096
Rye	434	555
Beans	13,601	14,018
Peas	6,526	7,892
Total Corn Crops	<u>158,701</u>	<u>157,786</u>

Green Crops.

Potatoes	1,815	1,704
Turnips	34,191	34,424
Mangold	4,666	4,487
Carrots	191	107
Cabbage	1,613	1,396
Vetches	10,686	10,431
Total Green Crops	<u>53,162</u>	<u>52,549</u>

	1881.	1882.
Clover, Sainfoin, and Grasses under Rotation	45,341	44,564
Permanent Pastures not broken up	148,799	149,150
Flax	I	
Bare Fallow	11,652	12,928
Woods, Coppices		21,661

Elevation of Surface. The surface of the county is very diversified, varying from the flat meadows bordering its rivers, to the rounded knolls of north Oxford and the chalk downs of the south; but on the whole there is a gradual slope from the north and west to the south and east over the Liassic and Oolitic strata, till the chalk hills are met in the south, through which the Thames has cut its channel.

A continuance of the Cotteswold gives to the western side a considerable elevation, Epwell Hill rising to 743 feet, and the high ridge forming the Warwickshire boundary at the Rollright Stones, 737 feet, Enstone sinking to 495, and Woodstock to 333, while the meadows near Buckingham are 264 feet. The Cherwell at Banbury is 300 feet, and after its junction with the Isis at Oxford is about 190 feet. Bensington is 150 feet, and Henley is 120 feet above the sea level.

The long range of the Chilterns runs north-easterly from Goring, and reaches at Nettlebed the height of 696 feet. Nettlebed and Nuffield 698 feet, and Woodcote of almost equal elevation, form a plateau most interesting in its floral treasures and commanding extensive and varied views. Towards the Bucks border, overlooking a large extent of level country, thickly studded with picturesque villages, rises to a height of 809 feet the bold chalk down called Beacon Hill, a prominent object in the chalk range when seen from Shotover or Wood Perry.

GEOLOGY.

Space only allows a brief sketch of the geology of the county to be given. The following works on local Geology may be enumerated for the convenience of those wishing to fully study the subject.

The Geology of Oxford and the Thames Valley 1871. *Sections of the Strata near Oxford.* *Journ. Geological Society*, vol. xv.

pp. 115-307, 1859. *Prof. Phillips. South-Eastern Attenuation of the lower Secondary Rocks and probable depth of the Coal Measures under Oxfordshire*, 1859, *E. Hull, Journ. Geol. Soc.*, vol. xvi. p. 63. *On the Chalk in Oxfordshire*, *Journ. Geol. Soc.*, vol. xvii. p. 166, 1861, *W. Whitaker. Geology of the Eastern portion of the Banbury and Cheltenham Railway*, *T. Beesley. Geological Proceedings*, vol. v., No. 4. *Geology in Kelly's Directory of Oxon, Berks, and Bucks*, 1883, by *W. Jerome Harrison*.

The Ordnance Maps of the County:—*Geological Survey, whole sheets*, no. 7, 13, 34, 44; *quarter sheets* 45 N.W., 45 S.W., 45 N.E., 45 S.E., 53 S.W., *with descriptive memoirs. Geology of part of Oxfordshire and Berkshire by Hull and Whitaker. Geology of Country round Banbury, Woodstock, Bicester, and Buckingham by A. H. Green. Geology of the Country round Woodstock by E. Hull. Geology of the London Basin by W. Whitaker.*

The Geological formations met with in Oxfordshire are—

LIAS	{ Lower Lias Clay. Marlstone. Upper Lias Clay.
LOWER OOLITE.....	{ Inferior Oolite. Great or Bath Oolite. Forest Marble. Cornbrash.
MIDDLE OOLITE	{ Oxford Clay. Lower Calcareous Grit. Coral Rag.
UPPER OOLITE	{ Kimmeridge Clay. Portland Sand. Portland Stone.
CRETACEOUS LOWER...	Lower Greensand.
CRETACEOUS UPPER...	{ Gault. Upper Greensand. Chalk.
EOCENE	Woolwich and Reading Beds.
POST-PLIOCENE-DRIFT.	High Level Gravels and Clay, Low Level Gravels.

In the extreme north-west of the county are found the oldest rocks, and as the county is traversed from the Warwick boundary

to Henley, newer and newer beds are passed over, which lie one upon the other and all slanting towards the south-east; the beds of the various formations running in irregular lines from the south-west to north-east.

The Lias. The Lower Lias shows itself as a bluish clay in the district drained by the Stour, near Ascott, and more extensively in the Cherwell valley which is cut down to the same formation from the Warwick border to Lower Heyford. The Worton brook drains another extensive portion from Great Tew to the Cherwell, and the Lower Lias is again present on both sides of the Evenlode valley as far south as Charlbury. There are but few sections; but one near Banbury shows a hard, shelly limestone with numerous fossils; it is locally called Banbury Marble; it takes a fair polish and is worked into chimney-pieces.

Marlstone or Middle Lias forms a broad elevated plateau situate between the Warwick border on the north and the Swere brook. It has outliers of Upper Lias upon it to the west and south of Banbury, and a terrace runs along the east side of the Cherwell to Rousham, a more or less detached strip occurring also on the western side. It also crops out in narrow slips on both sides of the Evenlode valley, and portions of it are also seen at Great Tew, Little Tew, Heythrop and at Enstone, where the Glyme valley has been excavated into the Marlstone.

The top of the plateau of Marlstone, which is a sandy limestone more or less coloured by iron oxides, extending 5 or 6 miles north-west and south of Banbury, is called the Rock bed, and at Adderbury is largely worked for iron ore; in 1874 as much as 36,000 tons, valued at 7221*l.*, having been excavated. Ore also exists at Fawler, Swalecliffe, etc. *Rhynchonella tetrahedra*, *R. rimosa*, *Terebratula resupinata*, *T. subpunctata*, *T. Edwardsii*, etc. are characteristic fossils often found in masses called 'blue jacks' by the workmen. *Thlaspi perfoliatum*, *Genista tinctoria*, *Polygonatum multiflorum* are rare plants found on this stratum.

Upper Lias Clay. This consists of bluish clay and shales which once entirely covered the Marlstone, but have been so denuded as now to consist only of narrow strips and outliers. In some cases portions are let down by faults into the Marlstone

and thus saved from denudation. In the Evenlode valley they exist as a narrow strip on each side, becoming gradually thinner, until between Charlbury and Stonesfield they entirely disappear. Other strips are seen in the upper portion of the Glyme valley about Enstone and Heythrop, and in the Cherwell valley from Rousham northwards. Outliers may be observed at Steeple Barton, Milcomb, Bloxham, etc. At the base of these Liassic clays 'lies a thin but well-marked series of whitish marly clays, with bands of white or cream-coloured earthy limestones' which have been well investigated by Messrs. Beesley and Walford. The characteristic fossils include *Ammonites serpentinus*, *A. bifrons*, *A. Normanianus*, *A. annulatus*.

Lower Oolites. The Northampton sands, as some sandy beds which are found upon the Upper Lias beds in North Oxfordshire, are called. Epwell Hill, 743 feet high, is capped with these sands, which also cover the Rollright ridge and stretch southwards to Chipping Norton and east to Duns Tew and Steeple Aston. Wigginton, South Newington, Crouch Hill and Tadmarton camp are capped with them and many outliers are found to the south and south-west of Banbury. A narrow strip of country on each side of the Cherwell valley from Souldern to Upper Heyford is also covered with them. Although the term Northampton sand is given to this formation, it is necessary to bear in mind that it includes *two* formations, the *lower* part belonging to the *Inferior Oolite*, the *upper* portion to the *Great Oolite*. Eastwards, in Lincolnshire and North Northamptonshire, these beds are separated by a thick bed of limestone which has thinned out so as to allow these two sands to run together and to become almost indistinguishable. *Ammonites Murchisoniæ* is a typical fossil of the Inferior Oolitic sands.

The high ground capped with these sands yields many interesting plants, such as *Filago minima*, *F. apiculata*, *Gnaphalium sylvaticum*, *Galium saxatile*, *Teesdalia nudicaulis*, *Ornithopus perpusillus*, *Avena flexuosa*, *caryophyllea*, and *præcox*, *Calluna* and *Rubus Idæus*.

Great or Bath Oolite. To the south of the district covered by the Northampton sands the beds known as the *Stonesfield slates* occur in the form of a laminated sandstone, splitting

readily along the bedding planes into slabs thin enough to be used for roofing purposes. Immense numbers of fossils, not only of animals but of plants, have been met with in them, characteristic series of which are preserved in the University Museum. At Sarsden there are several quarries from one of which bones of a *pterodactyle* have been obtained. As a rule this stone does not form good building material, but the Tainton quarries have produced the most durable stone in the county; Burford Church, Blenheim Palace, the inside of St. Paul's Cathedral and many old buildings in Oxford being composed of this Tainton stone.

Many sections of these beds are exposed in the Dorne and Evenlode valleys. On the Stonesfield bed rests a group of limestone marls and clays 20 or 30 feet in thickness, which forms the upper band of the Great Oolite. This bed entering the county on the west, passes by Burford and Wychwood, spreads out in a flat plateau on which Ditchley, Kiddington, Worton, Glympton, Steeple Barton, etc. are situate. It also borders the Windrush river at Asthal, Minster Lovell, and Witney. As it crosses the Cherwell it becomes much narrower, but on the east side of the river it spreads out into an extensive tract of country to the Northamptonshire boundary; Cottisford, Mixbury, Fritwell, Ardley, etc. standing on it. The rock forms a tabulated surface, intersected by narrow channel-like valleys and sloping gradually to the south at an angle of about 1° nearly corresponding with the dip of the beds. In fact it forms a repetition of the Marlstone plateau and, like that, is dotted over with outliers, in this case of Forest Marble capped by Cornbrash and Oxford Clay. East of the Cherwell it is covered with a thick deposit of drift which gives an undulating surface to the country about Cottisford and Hethe. Good sections are exposed by Enslow bridge, fossils are numerous, thick beds of *Terebratula* occurring in excellent preservation. The escarpment of the Great Oolite is much broken by faults, and the beds are much shaken about and tilted. The total thickness of the beds is estimated at 200 feet. The rarer plants found on the Great Oolite are *Stachys germanica*, *Salvia pratensis*, *Thlaspi perfoliatum*, *Astragalus danicus*, *Cynoglossum montanum*, *Monotropa*, the latter plant occurring on two small

outliers, one at Islip and one at Middleton; in the latter place it is associated with *Cephalanthera pallens*. *Clematis vitalba*, *Carduus eriophorus* and *Brachypodium pinnatum* are also frequent on the Oolite.

Forest Marble. This sub-formation of the Great Oolite is so-called from its occurrence in Wychwood Forest, of which it forms a large portion. It consists of hard, flaggy limestones, much ripple marked and often formed of broken oyster shells cemented together by carbonate of lime. It is about 25 feet thick and from Wychwood the outcrop of the rock runs between the plateau of Great Oolite and Cornbrash to Bucknell, where it is cut off by a fault bringing up the Great Oolite. There is a large outlier in Blenheim Park and another at Dornford; near Tadmarton a portion is let down into the Great Oolite by a fault. Thin inliers are seen in the brook courses north of Bicester and the formation is also seen in the centre of the inliers of Cornbrash at Islip and Oddington. Southwards towards Witney it becomes very thin and reaches its southern exposure at Brize Norton.

Cornbrash. This, the higher formation of the Lower Oolite, consists of a group of limestones from 6 to 15 feet thick, very regular in its bedding and as constant in its occurrence as the Forest Marble is erratic. The limestones are either rubbly or solid. In colour they are blue internally, but weather to a cream colour or brown. The arable land where this rock forms the subsoil is of a deep reddish-brown colour. Its typical fossil is the pretty *Avicula echinata*. The outcrop of the Cornbrash runs from Brize Norton by Witney in a narrow strip to Woodstock, where it broadens out northwards so as to take in Tackley, narrowing to a few hundred yards as it crosses the Cherwell, after which it again widens to 2 or 3 miles from Kirtlington by Bicester to Fringford, forming a flat uninteresting country. A curious row of inliers brought up along an anti-clinal line stretching far eastwards occur as dome-shaped masses rising out of the flat dull plain of the Oxford clay and on these inliers the villages of Islip, Oddington, Chesterton, Merton, and Ambrosden have been built. The arable land on the Cornbrash is well adapted to the growth of wheat. Few characteristic plants occur.

Middle Oolites. The **Oxford Clay**, a thick blue clay weathering on the surface to yellow, commences in the form of a low ridge of wet ground rising above the flat surface of Cornbrash, and covers a broad tract of the county from Lechlade, by Bampton, Ducklington, South Leigh, Yarnton, Hampton Poyle, the dreary flat of Otmoor, to the Bucks border, forming remarkably dull and unpicturesque country. Outliers occur at Wilcote, Ramsden Heath, Coombe, Tackley Heath, and Kirtlington; everywhere it forms a cold stiff land difficult to cultivate and often under pasture. The London and North Western line from Bletchley passes almost entirely over this formation, and passengers by it obtain little idea of the varied and beautiful character of much of the Oxfordshire scenery. Near Oxford the clay is about 600 feet thick. *Gryphæa dilatata* is a typical fossil. The surface of the clay is rendered less heavy and dull by a thick deposit of Drift, the Wychwood outliers being capped with a high level quartzose gravel reaching an elevation of 500 feet. To this gravel deposit we owe the occurrence of several ericetal plants and its juncture with the clay is shown by some springs which still yield *Sphagnum* and a few uliginous plants. Tackley Heath is also covered with gravel drift, on which *Rosa spinosissima* occurs, and North Leigh is similarly formed, but in this case *Ulex Gallii*, *Calluna*, *Sagina nodosa* are the plants we owe to it, the clay underneath holding up the water and thus giving a home for *Eleogiton frutans* and *Peplis portula*. The common plants of the Oxford Clay are *Senecio tenuiflorus*, *Picris echinoides*, *Juncus glaucus*; *Mentha piperita*, *Stellaria palustris*, *Rumex maritimus* being confined to it or to the alluvium with which it is covered.

Lower Calcareous Grit forms a layer about 70 feet thick, and consists of yellow sands occasionally bound together by a calcareous cement and very changeable in character. In Berkshire it is found on Wytham Hill and in Oxfordshire 'it forms a tabulated area on which are built Headington, Elsfield, Beckley, and Stanton St. John;' and although this attains no great height, very extensive views over the Clay and Cornbrash districts of Oxfordshire may be obtained from the summit of the northern escarpment. *Turritis glabra*, *Vicia lathyroides* are found on it, and the small valleys which flow from the northern

and western escarpments afford the most interesting bog plants in the county. Capping this formation is the **Coral rag**, which is largely composed of shells and corals, *Isastrea* and *Thecosmilia* being especially frequent. The Coral rag with its associated beds, as it has been said, forms a tabulated area to the east of Oxford, the beds sloping gradually to the south at an angle of 1°. In Berkshire it stretches in a nearly continuous band of variable width from Faringdon to Sandford and crossing the river into Oxfordshire joins the area stretching from Iffley north and eastwards. Its sudden disappearance at Wheatley is probably owing to an unconformable overlap of Kimmeridge Clay. The beds here are extensively quarried, and form an anticlinal dipping under the Kimmeridge Clay in every direction from the centre. The beds are lowered by a fault which at Forest Hill brings the *Lower Green Sand* against the *Coral Rag*; at Holton the strata are overlapped by Kimmeridge Clay. The quarries at Headington have supplied much of the stone for building purposes in Oxford, Wadham College being one of the best examples, but the stone is not durable and should be laid so as not to expose the bedding planes.

Kimmeridge Clay. This is a very stiff dark blue or olive-green clay, sometimes sandy and occasionally with bands of fossiliferous limestone. Its thickness in Oxfordshire is about 100 feet, and it stretches in a very irregular outline from Sandford to Thame, forming flat pasture land about Toot Baldon, Cuddesdon, and Horspath. Its upper limits are much obscured by a thick drift deposit capping the higher ground from Wheatley to Thame. Crystals of selenite are not uncommon in it, and are frequent in the brick pits at Headington. *Ostrea deltoidea* is common. On Shotover its junction with the Portland Sands is marked by numerous springs, about which *Drosera*, *Blysmus* and other bog plants were formerly found.

Portland Sands are some brownish sands resembling the calcareous grit, in structure differing in the peculiarly rounded lumps which the sandstone forms. It is well seen in a small quarry on Shotover Hill. The beds are from 50 to 90 feet thick but make no great show in the county. They form the lower zone of the Shotover range, which may be considered to extend southwards as far as Garsington and Cuddesdon. The

Portland Stone is a white limestone, which is worked at Garsington. A second isolated area of Portland Stone occupies the high ground west of Great Haseley and Great Milton; another portion is found east of Thame. The Haseley quarries formerly yielded *Ophrys aranifera*.

The iron sands capping Shotover are coloured on the Geological Map as if they belonged to the Lower Greensand. Much controversy has taken place respecting them, some authorities suggesting that they are *Purbeck beds*, the top of the Jurassic system, but they are now more usually referred to the **Wealden**—a fresh-water formation, the occurrence in them of some fresh-water *Crustacea* supporting this theory. On the eastern side of Shotover, the sands (Wealden) rest on the Kimmeridge Clay without any *Portland* between them. These sands are rich in vegetation, *Gnaphalium sylvaticum*, *Ornithopus*, *Tanacetum*, etc. occurring.

The Cretaceous Formation.

The Lower Greensand consists of an area extending from Culham to Burcott, and southwards to Clifton Hampden. Along the northern side the beds form an elevated ridge overlooking the Thames, and at Nuneham, where this ridge is well wooded, gives a scene of considerable beauty. East of Chiselhampton this formation is covered by an overlap of the *Gault*, but reappears at Albury and Great Haseley, the country between Albury and Thame being deeply covered with northern drift. *Ammonites Deshayesii* and *Terebratula Silla* occur in this formation. *Jasione* and *Aspidium angulare* are found on it.

The Gault is a pale blue clay, about 200 feet thick; and, unlike the distribution of the *Lower Greensand*, the *Gault* extends in an unbroken band across the country from Dorchester to the Bucks boundary near Thame. The ground formed by it is generally flat and marshy, and *Rumex maritimus* occurs on it about Albury, and the *Fritillaria* is found in its Thame meadows about Chiselhampton.

The Upper Greensand extends parallel with the *Gault* in a belt of variable width from Mongewell to Bensington, South Weston, and Chinnor to the Bucks border.

The Chalk. The most striking feature in South Oxfordshire is the bold chalk escarpment stretching in an indented line of considerable beauty from Goring to Bledlow, at Nuffield rising to 698 feet and at Chinnor to 809 feet. The table-land is split up into many branching dry valleys. North of Watlington are three outliers, at Gilton hill, at Adwell where there is a tumulus, and another to the north-west of Pyrton. The junction of the lower chalk with the green sand is well marked by a line of springs about which have been built the pretty villages of Mongewell, Shierburn, Lewknor, Aston Rowant, Chinnor, and Bledlow, the latter being especially interesting.

The *Lower Chalk* is usually rather darker in colour than the *Upper* and has but few flints. It is about 500 feet thick and constitutes all the chalk country north of the escarpment, up which it extends for some distance, as also along the large valleys which have been worn through it. Between the Lower and Upper Chalk occurs a hard rock called the *Rock band*, which forms the crest of the Chiltern Hills. It never contains flints and varies from 3 to 7 feet in thickness. On this rests the *Upper Chalk*, about 300 feet thick, containing flints in large numbers always in the planes of bedding. This Upper Chalk stretches to the east and south as far as the county boundary. The plants limited to the chalk include *Linaria repens*, *Fumaria Vaillantii*, *Orchis simia* and *militaris*, *Cephalanthera ensifolia*, *Gentiana germanica*, *Iberis amara*, *Hypericum montanum*.

Tertiary Period. The Eocene is represented by outlying fragments of the **Reading beds** in the form of mottled, tenacious clays, free from calcium carbonate, generally arenaceous. At Nuffield there is a small patch of sand on the highest part of the hill. On Watlington hill they exist as light brown coloured sand and clay with rounded flints. It is evident that these Reading beds once covered the chalk from which they have been removed by denudation, traces of them are found about Hailey wood, and at Stokenchurch a plastic clay belongs to this formation. Other outliers exist at Stoke row, Turville common, Woodcote common, Maidengrove, Hollandridge, Ibstone, and Nettlebed, the latter being capped by *London Clay*.

At Binfield Heath and Caversham they cover more than a square mile; in the latter place the *London Clay* is brought in by two faults at its eastern end. It consists almost wholly of bluish grey clay, in which are *septaria*, and is much covered by gravel.

These outliers of the Tertiary are very important factors in Botanical distribution, the stiff clay holding up the water in small ponds, in which *Peplis*, *Helosciadium inundatum*, *Littorella*, *Ranunculus truncatus* occur, and when covered as at Binfield with sandy gravel, afford a home for *Centunculus*, *Radiola*, *Scutellaria minor*, *Ulex nanus*, *Erica tetralix*, *E. cinerea*, *Nardus stricta*, *Aira flexuosa*, etc.

The *Drift* has already been frequently mentioned. To the occurrence of this in the form of the *high level gravels* the existence of our ericetal flora is especially due. The *low level gravels* have been formed by the present rivers cutting their way and reasorting the older drift pebbles.

The *Alluvial deposits* may be seen by the Windrush river from Witney to its junction with the Isis, where they are nearly a mile wide, and also in the rich water-meadows of the Cherwell and Thames, Port Meadow being a good example. *Caltha palustris*, *Cardamine amara* and *pratensis*, with the *Fritillaria*, are especially noticeable features of their flora.

DEAINAGE.

Oxfordshire is almost entirely included in the *Thames basin*, the area of which, according to the report of the Rivers Commission, is about 5162 square miles. The greatest length from Trewsbury mead to the estuary of this basin is 201 miles: its greatest breadth is from Priors Marston in Warwick to Fernhurst in Sussex. It includes besides Oxfordshire the whole or nearly the whole of Berks, Bucks, Herts, Middlesex, Surrey, a third of Gloucestershire, a fourth of Essex, a sixth of Wilts and Kent, and small portions of five other counties.

The *Thames* rises on the south-eastern slope of the Cotswolds, reaches Oxfordshire at Kelmscott near Lechlade, and forms the county boundary between Oxford and Berks, thence to Henley, receiving in its course to Wolvercote the *Charney brook*, the *Windrush*, and the *Evenlode*.

Mr. Stacey calculated its dry weather summer flow between Wolvercote and Wytham was 11620 cubic feet per minute

Its dry weather winter flow 22624 " "

Rainy weather winter flow 35498 " "

During floods, winter flow 70996 " "

As the catchment basin of the Cherwell is almost as great as that of the Thames above Wolvercote, i.e. about 600 square miles, these figures may be doubled for the amount passing Iffley.

At Oxford the *Thames* is joined by the *Cherwell*, which rising at a summit level of about 450 feet in Northamptonshire receives in its southern course many small tributaries; at Dorchester the *Thame* rising at about 450 feet enters the Thames, which then receives no other important stream from Oxfordshire in its southern course.

The *Ouse* rises in Northamptonshire, and only drains a small tract of north-east Oxfordshire.

The *Stour* drains a still smaller tract of north-west Oxfordshire, which is the only portion of it belonging to the Severn basin.

BOTANICAL DISTRICTS.

Based upon the river drainage these are as follows:—

(1) **The Stour** district of the Severn drainage.

(2) **The Ouse** " " **Ouse** "

About nine-tenths of the county is in the **Thames drainage**—which we may divide into—

(3) **The Swere** or Upper Cherwell district.

(4) **The Ray** or Lower " "

(5) **The Isis** or Upper Thames, including the Windrush and Evenlode, and the main stream north of Oxford.

(6) **The Thame** or Mid-Thames, including the main stream of the Thames from Oxford southwards to Mongewell, and the country north of the lower Chalk.

(7) **The Thames** or Lower Thames, including all the county south of the Upper Greenstone formation.

Berkshire localities are inserted for the use of Botanists living near the border and are principally chosen from the Oxfordshire side of the county. When the plant occurs in the

border counties, those counties are quoted, unless the plant is common and is found in all of them.

1. **The Stour district** contains only about six square miles of country, in the extreme north-west of Oxfordshire; it is bordered on the west by Warwickshire, on the north-east by the turnpike road from Brailes to Tadmarton Camp, a portion of which is included in it; on the south it is limited by the turnpike road from Tadmarton Camp, by Mill Farm, to Holly Hill Farm, to the Warwick boundary. This small triangular district is drained by the Stour, which rises, at Stour's well, from the high ground near Tadmarton, and runs thence westward to the county boundary, receiving near Temple Mill a small stream, which rising near Tyne hill, passes through Birdrupp and Sibford Ferris, and is itself recruited by another brook, flowing from Handywater Farm. The eastern side of this Stour district is formed by the escarpment of the Tadmarton range of hills, and had not the top of Tadmarton Camp covered as it is with the Northampton sands been included, there would be scarcely an interesting plant found in it, consisting as it does of an area of arable land (with the exception of a bushy common) entirely under cultivation. Tadmarton Camp, however, forms one of the richest tracts for the Botanist in north Oxfordshire. On its sandy soil occur *Teesdalia Iberis*, *D C*, *Filago minima*, *Gnaphalium sylvaticum*, *Filago apiculata*, *Ulex nanus*, *Ornithopus perpusillus*, *Avena præcox*, *A. caryophyllea*, *A. flexuosa*, *Cuscuta epithymum*, *Hypericum humifusum*, *Galium saxatile*, *Rubus Idæus*, *Sisymbrium thalianum*, *Cerastium arvense*, *Stellaria graminea*, *Spergularia rubra*, *Sarothamnus vulgaris*, *Rubus pallidus*, *Hieracium Pilosella*, *Erica tetralix*, *E. cinerea*, *Erythraea pulchella*? *Digitalis*, *Euphrasia*, *Pedicularis sylvatica*, *Calamintha Acinos*, *Echium vulgare*, *Myosotis collina*, *M. versicolor*, *Sagina ciliata*, *Carex pilulifera*, *Saxifraga granulata*, *Hieracium boreale*, *Festuca ovina*, and *Agrostis vulgaris*. *Mentha sylvestris* grows in the lane adjacent.

2. **The Ouse district** is a small tract situated in the north-east of the county, about 8 miles long, and varying from 2 to 5 miles broad. Its boundaries are difficult to describe, but roughly they may be said to follow a line beginning on the table-land about half a mile east of Somerton, and turning

northwards to include Fritwell, sweeping round to include Horwell Farm, and joining the turnpike road to Brackley, which then forms the border to the Northants boundary, marching with that county to the Bucks border, the river Ouse itself limiting it to the north-east. Its eastern boundary is Buckinghamshire by Goddington to Poodle Farm. Its southern border is along the road from Poundon to Fringford, the latter place being included in it, then strikes off westwards so as to take in Hethe Braid, Stoke Lyne, Swift's House, to Ardley, where the Castle is probably the top of the watershed, and continues from Ardley towards Somerton, just omitting Chilgrove and Somerton field barn. The drainage is principally by a small stream rising a little east of Somerton, flowing by Fewcott, Stoke Lyne, and Hethe Braid, to Fringford, and thence by Goddington into Bucks. The main stream of the Ouse forms the county boundary for 4 or 5 miles, draining the parishes of Mixbury and Finmere. Geologically it is almost entirely on the Great Oolite, the surface, however, being much obscured by drift deposits. Near Fringford there is a small area on the Cornbrash. The most interesting portions are Cottisford Heath, Tusmore and Hardwick Heath (Oolite overlaid with flint gravel) which yield *Gentiana Amarella*, *Orchis pyramidalis*, *Carlina vulgaris*, *Campanula glomerata*, *Leucojum vernum* (extinct), *Helianthemum vulgare*, *Stellaria graminea*, *Hypericum pulchrum*, *Rubus rhamnifolius*, *R. leucostachys*, *R. rudis*, *R. Koehleri*, *R. diversifolius*, *Rosa tomentella*, *R. pruinosa*, *R. latebrosa*, *Parnassia palustris*, *Galium verum*, *Carduus acaulis*, *C. lanceolato-crispus*, *C. nutanti-crispus*, *Linaria spuria*, *Calamintha Acinos*, *Typha latifolia*, *Potamogeton densus*, *Carex binervis*, *Gymnadenia conopsea*, *Brachypodium pinnatum*, *Triticum caninum*, *Polystichum aculeatum*, *Hypericum humifusum*. Ardley wood yields *Daphne Mezereum* (adv), *Helleborus viridis*, *Aquilegia vulgaris*, *Campanula Trachelium*, *Eyrthraea centaurium*, *Euonymus*, *Berberis*, *Hordeum sylvaticum*.

Other interesting plants of the district are *Thalictrum riparium*, *Trifolium medium*, *Ribes nigrum*, *Geranium pyrenaicum*, *Tanacetum*, *Malva moschata*, *Valeriana dioica*, *Alchemilla vulgaris*, *Lithospermum officinale*, *Hippuris*, *Nepeta Cataria*, *Lysimachia nemorum*, *Astragalus glycyphyllos*, *Spiraea Filipen-*

dula, *Reseda lutea*, *Callitriche obtusangula*, *C. hamulata*, *Verbena*, *Ceratophyllum*, *Onopordon*, *Digitalis*? *Ornithogalum umbellatum*, *Calamintha menthaefolia*, *Pinguicula*, *Carex flava*.

The scenery of the district is very tame, an uninteresting series of ploughed fields bare of trees being the prevalent feature.

The Cherwell drainage forms two districts, viz. the **Upper Cherwell** or **Swere** district, and the **Lower Cherwell** or **Ray** district, whose boundaries are as follows:—

3. The **Swere** or *Upper Cherwell* district is a large tract in the north of the county, about 17 miles long, from Claydon to Somerton, and 22 miles wide, from Rollright to Stratton Audley. On the south-west it commences at Over Norton Common and follows very nearly upon the line of 1°31' long., by Great Rollright to the Warwick boundary; this it follows until it meets with the Stour district, at the north-west corner of which it again follows the Warwickshire boundary northwards, by Epwell and Shenlow hills, and the southern escarpment of Edgehill, by Mollington (which it excludes) to Claydon, and Claydon Hay, to the three shire stones. Hence it marches with the Northamptonshire boundary southwards, by Wardington and Chalcomb, to Banbury, where the Cherwell forms the boundary between the two counties as far south as Aynhoe. The *Swere district*, however, follows the Northants boundary eastwards, by Souldern to Round Hill Farm, when turning round westerly it bounds the Ouse district on the north, as far as Somerton, thence it follows an arbitrary line across the Cherwell valley to the 'Fox and Crown,' near Dunstew. From Dunstew westward its boundary follows the watershed of the Worton brook along the turnpike road through Ledwell, Great Tew, to Over Norton Common.

Besides the main stream of the Cherwell, this district is drained by the Swale brook, the Swere, the Worton brook, the Tor brook, the Croughton brook, and other small streams.

The Cherwell itself rises in Northamptonshire, from the high ground (at least 450 feet) about Charwelton (which in a mile radius also gives rise to the Leam and Avon), and enters Oxfordshire at Wardington, flowing south by Cropredy, where a skirmish took place between Rupert and the Parliamentarians.

Here a small stream comes in which supplies water to the summit-level of the Oxford Canal. Passing by Williamscoth to Banbury, the river, which has hitherto flowed through a broadly undulating tract, now reaches a more contracted valley, and cuts through ridges of more unequal elevation. Between King Sutton with its fine church spire, a prominent object in the landscape, and Aynhoe, home of the Cartwrights, the Cherwell is considerably reinforced by the Swale brook, whose three heads rising from the high western hills run at first in small glen-like valleys, draining that elevated tract which stretches from Edgehill to Tadmarton. *The first* of these heads is a stream, which flows by Horley, Drayton, and Wroxton; *the second*, the Torbrook, runs, like the foregoing, in a Liassic valley with Marlstone bands at some height above the stream, by Alkerton and Shutford; *the third* passes by Epwell, Swalecliffe, and the peculiar pentagonal mound called Madmars-ton camp, and the three unite near the picturesque Broughton Castle, and thence flow by Bodicot and Adderbury (birthplace of William Cole), to the Cherwell, which is immediately after reinforced by the *Swere*. This stream comes from the high ground near the far-famed Rollerich Stones, and drains by its two heads Hook Norton, Swerford, Wigginton, South Newington, then dividing Barford St. John from Barford St. Michael, and leaving Deddington to the south, is, as it has been said, received into the Cherwell near Aynhoe. After a southern course of about 2 miles the Cherwell, near Clifton, receives from the east the *Croughton Brook*; and 2 or 3 miles further on the *Worton Brook*, which runs through the park of Great Tew, by Lower Worton and the Castle mound, to the Cherwell near Chilgrove.

The best botanising ground in this district is to be met with on the western hills, capped as they are with the Northampton sand. **Tadmarton heath** will be found to yield many of the species given for Tadmarton camp in the Stour district. At **Hook Norton** occur *Paris quadrifolia*, *Polygonatum multiflorum*, *Aspidium aculeatum*, *Narcissus major*, *Orobis tuberosus*, *Centaurea Cyanus*, *Digitalis*, *Polygonum Bistorta*, *Verbena*, *Scolopendrium*; at **Swerford** *Spiranthes autumnalis*, *Hypericum quadrangulum*, *Orobis tuberosus*, *Monotropa*, *Polygonum Bistorta*, *Habenaria viridis*, *Ophrys apifera*, *Spiranthes*;

at Barford *Rosa mollissima*, *Orobanche elatior* Sutt., *O. minor*, *Picris hieracioides*, *Vulpia myuros*. At Horley *Chrysosplenium oppositifolium* occurs. Hanwell plantations yield many semi-naturalised plants, and the district round affords *Scirpus sylvaticus*, *Hypericum pulchrum*, *Veronica officinalis*, *Valeriana dioica*, *Pedicularis sylvatica*, *Orchis latifolia*, *Nardus stricta*, *Ophioglossum*, etc. On Epwell heath occur *Digitalis*, *Orobis tuberosus*, *Ulex nanus*. Shutford has several interesting plants, including *Parnassia* and *Menyanthes*, both very rare in North Oxford. *Filago minima* occurs at Crouch hill, near which also is *Lithospermum officinale*: *Cephalanthera pallens* is found in a spinney at the extreme north of the county. Bretch, near Banbury, on an outlier of the Oolite, yields a characteristic oolitic flora, strangely contrasting with that of the surrounding country, in *Alsine tenuifolia*, *Anthyllis vulneraria*, *Hippocrepis comosa*, *Astragalus glycyphyllos*, *Spiræa Filipendula*, *Echium*, *Allium vineale*, *Trifolium striatum*, *T. arvense*, *T. scabrum*, *Torilis nodosa*, *Hieracium Pilosella*, *Campanula glomerata*, *Myosotis collina*, *Saxifraga granulata*, *Carex præcox* and *Triglochin palustre*.

The Cherwell itself is bordered by *Butomus*, and *Nitella opaca* has been found in it with *Potamogeton natans*, *compressus*, *pusillus*, etc. Clattercut reservoir has *Alopecurus fulvus*, *Nasturtium terrestre*.

The scenery to the west of Banbury is very varied, and its flora, though fragmentary, the district being highly cultivated, is fairly representative. Among the plants which ought to be found are *Hypochaeris glabra* and *Equisetum sylvaticum*, while systematic work would repay the investigator.

4. The Ray or Lower Cherwell district is about 13 miles long, from Somerford in the north, to Oxford in the south, and 12 wide, from Sturdy's Castle to Piddington. On the north it is bounded by the arbitrary line running from Duns Tew, easterly to Somerford, whence it extends south of the Ouse district to the Bucks border near Goddington Hall. It then follows the county boundary southwards, by West Stan Hill, Piddington, Muswell hill, Arncott hill, Bourstall lane, to Studley, striking off thence in a south-westerly direction, between Blackwater and Stanton wood, to the Coralline oolite

plateau, on which, at the New Inn, it turns south-easterly by the road to Stanton St. John, to Forest Hill and follows the London road to Oxford. This boundary is artificial, and one which does not take in the whole of the Cherwell drainage, excluding as it does about 200 acres on the south of the road. As, however, this portion is the northern escarpment of the Shotover range, which geologically belongs to the Thame district, this boundary has been selected instead of a purely natural one in order to avoid confusion. From Oxford the boundary follows the Banbury road as far as Stratfield farm, pursues a north-westerly direction to Round Castle, and thence runs nearly due north, on the 1.20 line to Sturdy's Castle, by Tackley Heath and Hopcroft's Holt to Dunstew—the Banbury turnpike road fairly marking the boundary from Sturdy's Castle northwards.

The main stream of the Cherwell between Somerton and the Heyfords, passes through interesting ground, rich in marsh plants, and its waters are frequently ornamented in its southern course by masses of white and yellow lilies. Passing Rousham, at Northbrook bridge, the Cherwell finally leaves the Liassic strata, and enters on the Oolitic. Flowing by Tackley heath, and Kirtlington park, past Epslow quarries, and the road-side festooned with *Clematis*, it enters upon the Oxford Clay, which forms henceforward its bed, as it curves by Hampton, through its flat alluvial meadows by Kidlington and Water Eaton. Near Islip it receives the **Ray**, a many-headed stream; one of its largest feeders, rising in Buckinghamshire near Edgcott, enters Oxfordshire near Piddington, and drains—if this term can be appropriately applied—the flat ugly marsh of Otmoor and the bare country round. Another feeder comes from Poundon, by Bicester, and joins the Edgcott brook at Merton, the Bicester brook, receiving near Wendlebury a stream rising on the Oolite near Ardley, continuing in a tongue of that stratum, nearly through the belt of Cornbrash to Chesterton, whence its passage southwards is through the Oxford Clay. Several other brooks serve as feeders but they possess little interest, so we rejoin the Cherwell at Water Eaton, which cuts its way through pretty scenery to Marston, its banks adorned with fine old willows and handsome thorns, while its waters here and there show *Hydrocharis* and *Typha angustifolia*. Leaving

on the west Magdalen's lovely pile, it meets the Isis or upper Thames in classic ground at Oxford.

About Upper Heyford occur *Genista tinctoria*, *Geum rivale*, *Dipsacus pilosus*, *Trifolium medium*, the first and last being especially fine on the railway banks from Upper Heyford to Tackley; the marshy meadows yield *Cardamine amara*, *Geum rivale*, *Parnassia*, *Valeriana dioica*, *Menyanthes*, *Pedicularis palustris*, *Rumex maximus*? *Triglochin*, *Orchis latifolia*, *Eriophorum angustifolium*, *Carex ampullacea*, *C. paniculata*, etc. The higher ground on the Oolite supplying *Geranium lucidum*, *Anthyllis*, *Hippocrepis*, *Spiræa Filipendula*, *Rosa sepium*, *Petroselinum segetum*, *Carlina*, *Picris*, *Melampyrum pratense*, *Origanum*, *Calamintha Acinos*, *Nepeta Cataria*, *Orchis pyramidalis*, *Ceterach*, *Juniperus*.

About Middleton Stoney is the classic locality for *Salvia pratensis*. On an outlier of the Oolite in the Cornbrash near Middleton occur *Cephalanthera pallens* and *Monotropa*. The quarries near Kirtlington Station have, in addition to many of the plants enumerated above, *Trifolium subterraneum*. The railway cutting near has *Ophrys apifera*, *Scolopendrium*, etc. Near Tackley *Narcissus poeticus*, *N. biflorus*, *N. major*, *N. Pseudo narcissus*, *Orobis tuberosus*, *Rosa spinosissima*, occur.

Kirtlington and Weston peat-pits yield *Salvia pratensis*, *Schœnus nigricans*, *Menyanthes*, *Parnassia*, *Epipactis palustris*, *Molinia*, *Orchis latifolia*.

Otmoor has for its special plants a profusion of *Polygonum maculatum*, *Enanthe Phellandrium*, *Stellaria palustris*, *Malachium aquaticum*, *Atriplex deltoidea*, *Polygonum minus*; its more uncommon plants, relics of an older flora, being *Rumex palustris*, *R. maritimus*, *Samolus*, *Pulicaria vulgaris*, *Juncus compressus*, *Carex vesicaria*, *Utricularia vulgaris*, *Hydrocharis*, *Veronica scutellata*, etc. Others less typical of a marshy tract, and some owing their occurrence to the inliers of Cornbrash, are *Rosa decipiens*, *R. andegavensis*, *R. bibracteata*, *Anthemis nobilis*, *Epilobium tetragonum*, *Daphne laureola*, *Ribes sylvestre*, *Carex pilulifera*, *Bidens tripartita*, *Lactuca virosa*, *Verbena*, *Mentha subglabra*, *Chenopodium polyspermum*, *Typha angustifolia*, *Habenaria viridis*, *Ophioglossum vulgatum*, *Geum rivale*, *Carex strigosa*? *Narcissus Pseudo narcissus*, etc. Beckley

with **Stow Wood** and **Headington Wick** form perhaps the most interesting portion of botanising country in central England and their scenic attractions are almost equally great. The following list shows the obligations an Oxford botanist is under to the Coralline Oolite plateau and its escarpments—*Ranunculus parviflorus*, *Aquilegia*, *Sisymbrium Thalianum*, *Arabis hirsuta*, *Turritis glabra*, *Lepidium campestre*, *Spergularia rubra*, *Viola palustris*, *Silene anglica*, *Hypericum humifusum*, *H. pulchrum*, *Malva moschata*, *Geranium rotundifolium*, *G. lucidum*, *Genista tinctoria*, *Trifolium medium*, *T. arvense*, *T. subterraneum*, *T. scabrum*, *Vicia lathyroides*, *Lathyrus sylvestris*, *Spiræa Filipendula*, *Geum rivale*, *G. intermedium*, *Potentilla procumbens*, *Alchemilla vulgaris*, *Rubus cordifolius*, *Rosa rubiginosa*, *R. implexa*, *Sedum Telephium*, *Saxifraga granulata*, *Epilobium palustre*, *Parnassia*, *Hydrocotyle*, *Oenanthe Lachenalii*, *Adoxa*, *Galium uliginosum*, *G. erectum*, *Onopordon*, *Cirsium eriophorum*, *C. anglicum*, *Gnaphalium sylvaticum*, *Picris hieracioides*, *Carduus nutanti-crispus*, *Serratula tinctoria*, *Inula Conyza*, *Centaurea Cyanus*, *Gentiana Amarella*, *Campanula Trachelium*, *C. glomerata*, *Verbena*, *Pedicularis palustris*, *P. sylvatica*, *Melampyrum pratense*, *Menyanthes*, *Linaria elatina*, *L. spuria*, *L. viscida*, *L. vulgaris*, *Origanum*, *Calamintha Acinos*, *Nepeta Cataria*, *Teucrium scorodonia*, *Echium*, *Lithospermum officinale*, *Anchusa arvensis*, *Myosotis collina*, *Pinguicula*, *Anagallis tenella*, *Lysimachia nemorum*, *Daphne Laureola*, *Euphorbia amygdaloides*, *Triglochin*, *Zannichellia palustris*, *Neottia*, *Orchis incarnata*, *O. latifolia*, *O. angustifolia*, *Gymnadenia conopsea*, *Epipactis palustris*, *E. media*, *Paris*, *Gagea*, *Allium ursinum*, *Luzula maxima*, *Schœnus*, *Eriophorum angustifolium*, *E. latifolium*, *Carex pallescens*, *C. dioica*, *C. pulcaris*, *C. panicea*, *C. paniculata*, *C. echinata*, *C. Hornschuchiana*, *C. flava*, *C. ampullacea*, *C. præcox*, *Avena caryophyllæa*, *A. præcox*, *Calamagrostis Epigeios*, *Koehleria cristata*, *Molinia cœrulea*, *Avena pubescens*, *Triodia*, *Poa nemoralis*, *Brachypodium pinnatum*, *Bromus erectus*, *Ophioglossum vulgatum*, *Athyrium*, *Filix femina*, *Aspidium dilatatum*, *A. spinulosum*, *Chara hispida*, *Equisetum Telmateia*, *Ophrys apifera*, *Samolus*, *Scirpus multicaulis*, *S. pauciflorus*, *Iris Pseudacorus*, *vera*.

Marston and its meadows yield *Apium graveolens*, *Ranunculus*

Lingua, *Typha angustifolia*, *Potamogeton serratus*, *Ranunculus Drouetii*, *Carex acillaris*, *C. vesicaria*, *Habenaria viridis*, *Lathyrus Nissolia*, *Fritillaria*, *Mentha cardiaca*, *Rosa tomentosa*, *Blysmus*, *Pedicularis palustris*, *Hottonia*, *Callitriche obtusangula*, *Dipsacus pilosus*, *Rosa Watsoni*, *Pimpinella major*, *Anagallis tenella*, *Valeriana dioica*, *Myriophyllum spicatum*, *Avena pratensis*, *Vulpia myuros*, *Catabrosa aquatica*, *Festuca triflora*, *Cardamine amara*, *Stellaria palustris*, *Bromus racemosus*, *Polygonum mite*.

Other interesting plants of the Cherwell district are *Lonicera Caprifolium*, *Myogalum nutans*, *O. umbellatum*, *Narcissus major*, *Helleborus viridis*, *Lamium hybridum*, *L. maculatum*, *L. decipiens*, *Catabrosa*, *Salix rubra*, *amygdalina*, *viminalis*, *Smithiana*, *purpurea*, *Nasturtium amphibium*, *sylvestre*, *Silene noctiflora*, *Ranunculus sceleratus*, *Cicuta virosa*, *Asplenium* *Adiantum nigrum*, *Trichomanes*.

5. The Isis or Upper Thames district is a large tract of country drained by the Thames from its entrance into the county to its union with the Cherwell at Oxford, including the country drained by its tributaries, the *Windrush* and *Evenlode*. It is 22 miles long, and 18 broad in its extreme length and breadth. Its boundaries are as follows:—In the north-west corner, where the counties of Warwick, Worcester, Gloucester, and Oxford meet at the Four Shire stones, the district is bounded on the north by Warwickshire, and follows the county line in a north-easterly direction till it meets with the *Stour* district about Hotley Hill farm. It then turns directly south, by Great Rollright to Over Norton Common, when the *Upper Cherwell* or *Swere* district forms its northern border to Dunstew, and also its eastern border to Oxford. Its southern limit is the Thames from Oxford to Kelmscott, Berkshire being separated from it by that river. Its western border is Gloucestershire from Kelmscott northwards to the Four Shire stones.

The Thames enters Oxford, as it has been said, at Kelmscott, passing through flat and not very interesting country, to the ancient bridge of Radcot, and through broad alluvial meadows, by Bampton with its spire, a prominent object in the landscape; and on through 'low meadows often overflowed by rage of rain,' as Leland says, in which the Charney brook assists, by adding

the waters it has collected from Broughton Poggs, Alvescott, Bampton, and Aston. Then by Standlake Common (now a topographical expression), it receives the Windrush, a stream of considerable beauty, over 30 miles long, which rises on the Cotteswolds at about 900 feet summit elevation, enters Oxfordshire near Burford, with its fine church of Tainton stone, and drains that tract of the country, once grassy down, fragrant with thyme, and adorned with *Pulsatilla*, *Herminium*, *Cineraria*, and *Ophrys aranifera*, but now denuded of these, and converted into arable ground, bare and bleak, and only showing at intervals on its road borders on the site of some old quarry, too barren to be utilised, traces of its former floral glories. Nor, as the stream hurries (or as Drayton writes, 'scowres' to join the Thames) by Minster Lovell to Witney does the aspect of the country favourably compare with that which it exhibited to the eighteenth century botanist, when Wychwood covered with its sylvan beauty and its rich profusion of flowers the fields, which even Murray now describes as desert-like in barrenness. Still, some of its old hedgerows show *Anemones* and *Stachys germanica*; but it is through country comparatively of small botanical interest, that the Windrush hastens by Witney (despoiled to a great extent of its glory), Ducklington, and Cokethorpe's alluvial meadows into the Thames, which bends northwards by Stanton Harcourt and Bablock Hithe, to Eynsham, where some small brooks draining South Leigh (home of Sibthorp) come in; it then leaves on the south the Beacon Hill. Near Cassington the Evenlode brings in its turbid waters, at its commencement gathered in a wide tract of Lias, at a low summit level, between Stow and Icomb, a feature of considerable interest to the physiographer. It runs about 30 miles from its source, to its juncture with the Thames, in winding sweeps, whose general direction is almost parallel with that of the Windrush; entering the county near Kingham, it flows by Bruern's antique abbey, by Shipton, the lingering home of *Botrychium*, and by Ascott to Charlbury, where the Wychwood streams add to its volume, draining as they do the pools in Cornbury quarries with their hawthorn-covered sides. From Charlbury to Handboro the river flows in curves of great beauty, bordered by cliffs whose hanging woods are here and there adorned with the

pencilled flowers of the wood vetch, or starred with *Gagea*, and filled with masses of primroses, while the broad meadows of Liassic clay are covered with an extent of emerald pasture, whose continuity is only broken by brilliant Marsh Marigolds, or pale, faint, Cuckoo flowers. Between Charlbury and Handboro so sinuous is the stream that the railway crosses it nine times in 6 miles; Stonesfield, with its quarries, being about midway between the two places. Near Bladon, the Evenlode is reinforced by the Glyme, a two-headed stream, one branch draining Heythrop, the other Enstone, and uniting above Kiddington to drain Ditchley and Glympton, and the once rich common land of Wootton Heath. Here the Glyme is joined by the Dorne, whose source is likewise near Heythrop, but strikes off easterly to Westcott Barton, when it turns southwards almost parallel with, and not far distant from, the Cherwell, till it joins the Glyme above Woodstock, where having ornamented Blenheim Park, it is itself in turn absorbed by the Evenlode, which now flows by Church Handboro and Cassington into the Thames. Round the handsome headland near Wytham with its *Cephalanthera* haunted woods the Thames with its rich aquatic vegetation curves with a bold sweep to the northwards in a course of great geological interest, until near Yarnton it again bends to the south, by Godstow's ruined walls, by the *Hottonia* frequented ditches of Port Meadow and Binsey, and the *Limnanthemum* ornamented pool of Medley, to the *Senecio* covered walls of Oxford.

Wychwood is still the most interesting place to visit in this district, and its vistas—through its fine hawthorns, its hanging woods, with their profusion of pale primroses, and meadow saffron, its glades blue with columbines, or starred with malodorous garlic, the beauty of the fine old beeches in the Park, and the contrast of the lonesome pools, bordered with *Bartramia* moss forming carpets of brightest green, are quite sufficient in themselves to attract a town-dweller even if the following list of its plants had been more meagre in numbers or poorer in quality—*Cynoglossum montanum*, *Ranunculus parviflorus*, *Hel-leborus foetidus*, *H. viridis*, *Aquilegia*, *Mæchia*, *Montia*, *Malva moschata*, *Trifolium striatum*, *T. filiforme*, *Astragalus glycyphyllos*, *Vicia sylvatica*, *Spiræa Filipendula*, *Alchemilla vulgaris*, *Sorbus*

torminalis, *Campanula glomerata*, *C. Trachelium*, *Gentiana Amarella*, *Erythræa*, *Menyanthes*, *Atropa*, *Verbascum nigrum*, *Veronica montana*, *V. officinalis*, *Pedicularis sylvatica*, *Lathræa*, *Origanum*, *Teucrium Scorodonia*, *Ajuga reptans* var. *carnea*, *Cynoglossum officinale*, *Polygonum minus*, *Daphne Mezereum*(?), *Polygonum Bistorta*, *Triglochin*, *Orchis pyramidalis*, *Habenaria bifolia*, *Narcissus Pseudo narcissus*, *Convallaria*, *Gagea*, *Allium ursinum*, *Scirpus setaceus*, *Carex pulicaris*, *C. pallescens*, *C. paniculata*, *C. stellulata*, *C. pilulifera*, *C. flava minor*, *Calamagrostis Epigeios*, *Avena præcox*, *A. pubescens*, *Melica uniflora*, *Vulpia sciuroides*, *Nardus*, *Trichomanes*, *Botrychium*, *Polypodium Robertianum*, *Ophioglossum*, *A. Adiantum nigrum*, *Salvia pratensis*, *Asperula odorata*, *A. cynanchica*, *Lithospermum officinale*, *Lysimachia nemorum*, *Ophrys apifera*, *Blysmus*.

Charlbury and Stonesfield quarries yield *Arabis hirsuta*, *Thlaspi perfoliatum*, *T. arvense*, *Alyssum calycinum*, *Lepidium campestre*, *Viola permixta*, *Saponaria*, *Alsine tenuifolia*, *Malva moschata*, *Geranium rotundifolium*, *Anthyllis*, *Trifolium medium*, *T. scabrum*, *Astragalus glycyphyllos*, *Hippocrepis*, *Onobrychis*, *Ervum tetraspermum*, *E. gracile*, *Lathyrus sylvestris*, *Orobis tuberosus*, *Rosa micrantha*, *R. Kosinciana*, *Asperula cynanchica*, *Cirsium eriophorum*, *Inula Conyza*, *Crepis taraxacifolia*, *C. foetida*(?), *Verbascum nigrum*, *Melampyrum pratense*, *Lathræa*, *Origanum*, *Calamintha Acinos*, *C. menthaefolia*, *Stachys germanica*, *Salvia pratensis*, *Echium*, *Anagallis cærulea*, *Rumex pulcher*, *Ophrys apifera*, *O. muscifera*, *O. pyramidalis*, *Paris*, *Scolopendrium*, *Petroselinum sativum*, *Draba brachycarpa*.

Witney to Handborough by North Leigh is an interesting part: its principal plants being *Silene dichotoma*, *Sagina nodosa*, *Hypericum humifusum* and *pulchrum*, *Ulex Gallii*, *Trifolium filiforme*, *Ervum gracile*, *V. sylvatica*, *Peplis*, *Portula*, *Callitriche obtusangula*, *C. pedunculata*, *Hydrocotyle*, *Pimpinella major*, *Bupleurum rotundifolium*, *Asperula odorata*, *Cirsium eriophorum*, *Picris*, *Inula Conyza*, *Hieracium boreale*, *Atropa*, *Veronica montana*, *V. scutellata*, *Lathræa*, *Orobanche elatior*, *Mentha piperita*, *M. sylvestris*, *Melissa*, *Teucrium scorodonia*, *Cirsium anglicum*, *Stachys annua*, *Rumex pulcher*, *Amaranthus retroflexus*, *Zannichellia repens*, *Carex flava*, *C. pulicaris*, *Eleogiton fluitans*, *Juncus diffusus*, *Triodia*, *Molinia*, *Melica*,

Nardus, *Poa nemoralis*, *Equisetum Telmateia*, *Aspidium spinulosum* and *dilatatum*, *Habenaria viridis*, *Isolepis setaceus*.

The quarries about **Burford**, **Tainton**, and **Minster Lovell** have *Polygala calcarea*, *Saponaria*, *Alsine tenuifolia*, *Astragalus danicus*, *Spiræa Filipendula*, *Ophrys aranifera*, *O. pyramidalis*, *Stachys germanica*, *Avena pratensis* and other interesting plants.

About **Woodstock** and neighbourhood are found *Helleborus foetidus*, *Thlaspi perfoliatum*, *Viola permixta*, *Cerastium arvense*, *Geranium rotundifolium*, *Sarothamnus*, *Hippocrepis*, *Lathyrus Aphaca* (?), *Rosa mollissima*, *Enanthe peucedanifolia*, *Æ. fluviatilis*, *Asperula cynanchica*, *Filago spathulata*, *Erigeron acre*, *Monotropa*, *Menyanthes*, *Atropa*, *Hyoscyamus*, *Lathræa*, *Mentha sylvestris*, *M. cardiaca*, *Stachys germanica*, *Lithospermum officinale*, *Cynoglossum officinale*, *Anagallis cærulea*, *Ophrys apifera*, *Iris foetidissima*, *Gagea*, *Juncus compressus*, *Avena pubescens*, *Koehleria*, *Trichomanes*, *Ceterach*.

The district about Port Meadow and Wolvercote contains—*Sagina nodosa*, *Ervum gracile*, *Lathyrus Nissolia*, *Poterium dictyocarpum*, *Myriophyllum verticillatum*, *M. pectinatum*, *M. spicatum*, *Hippuris*, *Callitriche obtusangula*, *C. hamulata*, *Sium latifolium*, *Enanthe fistulosa*, *Æ. fluviatilis*, *Bidens tripartita*, *Erythræa pulchella*, *Limnanthemum*, *Veronica scutellata*, *Pedicularis palustris*, *Mentha Pulegium*, *Teucrium Scordium* (?), *Utricularia vulgaris*, *Hottonia*, *Samolus*, *Atriplex deltoidea*, *Chenopodium hybridum*, *C. rubrum*, *C. polyspermum*, *Rumex maritimus*, *Polygonum minus*, *P. mite*, *P. maculatum*, *Aristolochia*, *Salix rubra*, *S. purpurea*, *S. ferruginea*, *S. rugosa*, *Ceratophyllum*, *Potamogeton compressus*, *P. Friesii*, *P. flabellatus*, *Triglochin*, *Ophrys apifera*, *Allium vineale*, *Rhynchospora alba*, *Eleocharis E. acicularis*, *Isolepis setaceus*, *Carex pendula*, *C. Pseudo Cyperus*, *C. vesicaria*, *Asplenium Adiantum nigrum*, *Chara contraria*, *C. Hedwigii*, *C. vulgaris* var. *papillata*, var. *refracta*, var. *longibracteata*, *Stellaria palustris*, *Crepis taraxacifolia*, *Solanum nigrum*, *Senecio crassifolius*, *S. vernalis*, *Helosciadium ochreatum*, *Hydrocharis Morsus ranae*, *Malachium aquaticum*, *Stellaria neglecta*, *Nasturtium amphibium*, *N. palustre*, *N. sylvestre*.

In the west, **Bruern woods** contain *Corydalis claviculata*, *Rubus calvatus*, *Juncus diffusus*, *Orobis tuberosus*, *Hypericum humifusum*, *Potentilla procumbens*, *Rubus Radula*, *R. Koehleri*,

R. diversifolius, *Blechnum spicant*, *Aspidium spinulosum*, *A. dilatatum*, *Hieracium boreale*, *Carex ovalis*, *Agrostis canina*, *Callitriche pedunculata*.

The meadows about **Bampton** afford *Nitella opaca*, *Callitriche obtusangula*, *Rosa mollis*, *Bromus commutatus* and *racemosus*.

6. The Thame or Mid-Thames district is a portion of country about 13 miles long from Oxford to Mongewell, and 17 wide from Culham to Bledlow, entirely in the Thames drainage. On the north it is bounded by the Ray district, which has an artificial border in the London road from Oxford to Forest Hill. The line then follows the watershed by Stanton St. John northwards, by Woodperry to Studley, where it joins the Buckingham border, marching with it southwards by Waterperry, Shabbington, Thame to Henton, here turning south-west thence the boundary is the lower chalk formation, which proceeds in a well-marked line by the villages of Chinnor, Crowel, Aston Rowant, Lewknor, Shierburn, Pyrton, Brightwell Salome, Brightwell Baldwin, Fyfield farm and Crowmarsh, to the Thames at Mongewell, which forms its western boundary, to Oxford. The Thames from Oxford to Sandford flows through meadows rich with Fritillaries, its banks are bordered with the sweet-scented *Acorus*, and its waters are inhabited by *Potamogeton prælongus*, *flabellatus* and *compressus*, *Zannichellia macrostemon*, *Enanthe fluviatilis*, etc., and near Sandford appears for the first time in the river's course the lovely *Leucojum æstivum*. Bending round under the wooded heights of Nuneham to Abingdon, and curving again towards Culham, the stream finally separates itself from the Upper Oolites to enter the Cretaceous beds, here the Lower Green-sand, through whose conglomerate rock it cuts its way by picturesque Clifton Hampden to Day's Lock, beloved by artists. Shortly after, opposite the northern side of bold Sinodun hill, comes in *the Thame* which owes its parentage to the Oolitic rocks of Quainton and Brill, and the lower chalk escarpments of Tring. The *Brill water* enters Oxfordshire near Studley Priory (a home of *Aristolochia*), meeting near Menmarsh Farm a small stream which has its origin on the north-eastern escarpment of the Coralline oolite plateau near Woodperry, the united streams flow in an irregular course between Waterperry

and Holton woods. Here comes in a brook which rises on the north side of Shotover, at first its waters being half choked by *Chrysosplenium*, but gathering force on its way it forms the ornamental waters at Shotover House, and passing near Holton quarries, once the locality for the Spider Orchis, then flowing eastwards to the south of Holton wood, it joins the Boarstall stream, meeting *the Thame* near Holton Mill. That river entering Oxfordshire at Thame, forms the boundary between Oxon and Bucks, by Shabbington, north of Waterperry, where leaving Bucks it turns south by Waterstock, Wheatley, and Cuddesdon. South of Cuddesdon it receives the *Haseley brook*, which has drained a considerable extent of country from Adwell, Tetsworth, Haseley and Little Milton. Shortly afterwards, near Chiselhampton, comes in the *Chalgrove brook*, issuing like the former stream from the chalk near Lewknor, and draining Cuxham, Chalgrove, Ascot, and Stadhampton. South of Chiselhampton the Thame receives from the north the *Baldon brook*, which rises near Garsington, and flows by Toot and Marsh Baldon. The Thame then passes Newington and Drayton and flows by the fine abbey church of S. Birinus at Dorchester to the Thames, which now proceeds southwards by Shillingford, Bensington, and Wallingford, to the fine old elms of Mongewell.

Besides the Thame the Thames in its progress from Oxford has received a few small feeders, in themselves unimportant, yet the first interesting from the fact that it drains the south side of **Shotover, Bullingdon Green and Cowley Marsh**. This forms one of the most varied and prolific excursions to the Oxford botanist, only yielding to the Stow Wood and Headington excursion in the richness of its flora. The plants recorded from the above-mentioned places are as follows:—*Ranunculus parviflorus*, *Aquilegia*, *Arabis hirsuta*, *Lepidium heterophyllum*, *Alsine tenuifolia*, *Spergularia rubra*, *Montia*, *Androsæmum*, *H. humifusum*, *H. pulchrum*, *Geranium rotundifolium*, *G. pyrenaicum*, *Trifolium subterraneum*, *T. striatum*, *T. scabrum*, *Ornithopus*, *Lathyrus Nissolia*, *L. sylvestris*, *Hippocrepis*, *Orobus tuberosus*, *Spiræa Filipendula*, *Potentilla procumbens*, *Rubus rhamnifolius*, *cordifolius*, *R. thyrsoides*, *leucostachys*, *amplificatus*, *Salteri*, *rudis*, *Radula præruptorum*, *Koehlerii*, *pallidus*, *glandulosus*, *Rosa tomentosa*, *rubiginosa*, *micrantha*, *Pyrus*

Pyraster, *Peplis*, *Sedum Telephium*, *Saxifraga granulata*, *Chrysosplenium oppositifolium*, *Parnassia*, *Hydrocotyle*, *Petroselinum segetum*, *Pimpinella major*, *Adoxa*, *Asperula cynanchica*, *Valeriana dioica*, *Valerianella mixta*, *Onopordon*, *Cirsium eriophorum*, *Carduus nutanti-crispus*, *Serratula*, *Centaurea Cyanus*, *Gnaphalium sylvaticum*, *Senecio saracenicus*, *Bidens cernua*, *Erigeron acre*, *Hieracium umbellatum*, *H. boreale*, *Tanacetum*, *Jasione*, *Campanula Trachelium*, *C. glomerata*, *Gentiana campestris*, *G. Amarella*, *Veronica officinalis*, *V. montana*, *Pedicularis palustris*, *P. sylvatica*, *Melampyrum pratense*, *Orobanche major*, *O. minor*, *Calamintha menthaefolia*, *Nepeta Cataria*, *Echium*, *Teucrium Scorodonia*, *Lithospermum officinale*, *Myosotis collina*, *M. versicolor*, *Pinguicula vulgaris*, *Lysimachia nemorum*, *Anagallis tenella*, *Plantago Coronopus*, *Rumex sanguineus*, *Daphne Laureola*, *Euphorbia amygdaloides*, *Potamogeton polygonifolius*, *Triglochin*, *Orchis latifolia*, *O. incarnata*, *Ophrys apifera*, *Spiranthes*, *Epipactis palustris*, *E. latifolia* agg., *Cephalanthera pallens*? *Botryanthus*, *Luzula maxima*, *Blysmus compressus*, *Eleocharis multicaulis*, *Scirpus pauciflorus*, *Isolepis setaceus*, *Eriophorum latifolium*, *E. angustifolium*, *Carex dioica*, *pulicaris*, *divulsa*, *paniculata*, *echinata*, *pilulifera*, *pallescent*, *Hornschruchiana*, *flava*, *ampullacea*, *Calamagrostis Epigeios*, *Avena pubescens*, *Triodia*, *Koehleria*, *Molinia*, *Bromus erectus*, *Melica uniflora*, *Poa nemoralis*, *Catabrosa*, *Glyceria plicata*, *G. pediculata*, *Vulpia myuros*, *V. sciuroides*, *Nardus*, *Blechnum spicant*, *Aspidium Oreopteris*, *Botrychium*, *Lycopodium clavatum*, *L. selago*, *Equisetum sylvaticum*, *Drosera* (the six latter being almost certainly extinct), *Equisetum Telmateia*, *Stachys ambigua*, *Samolus*, *Typha angustifolia*, *Aspidium lobatum*, *A. spinulosum*, *A. dilatatum*, *A. Filix femina*, *Ceterach*, *A. Adiantum nigrum*, *Fumaria muralis*, *Draba brachycarpa*.

From Marsh Baldon and Nuneham are recorded *Genista anglica*, *Jasione*, *Aspidium angulare*, *Eranthis hyemalis*, *Pulmonaria*, *Agrimonia odorata*, *Salix rugosa*, *Spergularia rubra*.

In addition to the plants noticed as occurring between Oxford and Sandford may be mentioned *Sium latifolium*, *Ænanthe peucedanifolia*, *Polygonum maculatum*, *Carex vesicaria*, *C. Pseudo Cyperus*, *Utricularia*, *Hydrocharis*, *Brassica sylvestris*, *Atriplex deltoidea*, *Thalictrum Morisonii*, *Ranunculus fluitans*,

R. penicillatus, *Caltha Guerangerii*, *Tulipa sylvestris*, *Valerianella carinata*, *Geranium pyrenaicum*, *Sedum dasycyllum*, *Erigeron acris*, *Picris arvensis*, *Cochlearia Armoracia*.

The district about Rycote yields *Rumex maritimus*, *Triglochin*, *Ranunculus hederaceus*, *Chenopodium polyspermum*, *Rosa Reuteri*, *R. subcristata*, *R. verticillata*, *Rosa systyla*, *Fritillaria*.

Dorchester and its neighbourhood give *Acorus*, *Butomus*, *Anagallis cærulea*, *Spergularia rubra*, *Rosa tomentosa* var. *subglobosa*, *R. mollissima*, *Brassica sylvestris*, *Agrostis nigra*, *Rosa scabruscula*, *Ceratophyllum*, *Hyoscyamus niger*, *Erysimum cheiranthoides*, *Nasturtium amphibium*, *Parmica vulgaris*.

7. The Thames or Lower Thames forms a district about 16 miles long, from Hilton on the east border near Bledlow to Sonning; and about 10 miles wide from Goring to Henley; entirely in the Thame drainage. Its northern boundary is the Thame district, the line being drawn along the separation of the Upper Greensand from the Lower Chalk. On the east it is bordered by the county of Bucks, which stretches round southwards to Henley, where the Thames divides it from Berks westwards to Mongewell. The course of the Thames is so well-known that space need not be occupied in describing the various beauties of the river scenery in its southern journey by South Stoke, Goring, Whitchurch, Maple Durham to Reading, the names of these places being household words, and their presentments, more or less accurate, having been hung on the Academy walls from year to year. Lovely as is this riparian portion of the district, the interior offers almost as much to the pedestrian; the number and variety of its woods being most remarkable, and whether these consist of trees of the translucent leaved beech in early summer on the high grounds of Chinnor or Stokenchurch, or the smaller coppices in which the white beam is the prevailing feature, as on the northern slopes, or of that delightful blending of oak, beam, and beech about Nuffield, rising as these do in gradual rounding slopes with all the charming sweep peculiar to the chalk formation; or as at Ipsden where fine hollies, grand old yews, slender cherries, and picturesque thorns are mingled in rich luxuriance; in either instance the visitor will enjoy their striking beauty, intensified as it will be, when through their vistas he sees stretched out

before him the fertile country studded with villages across to Shotover and Dorchester, and far beyond this the long line of larches near Tadmorton Camp; or, looking southwards over the broken lines of the Bucks chalk hills, he may in favourable climatal circumstances catch a glimpse of the spire of Harrow, or see the Thames in sinuous course turn by Marlow towards Clifden. To the botanist these woods offer all the charms of solitude and freedom; he may wander for miles through verdant alleys whose groundwork begins in early spring with the glossy gold of the smaller celandine, followed by the pale stars of the wood Anemones, and myriads of primroses, these giving place to sheets of hyacinths "that seem the heavens upbreking through the earth," the blue being here and there relieved with the Yellow Archangel or brightened with Stitchwort; still later on the Bluebells are replaced by masses of the fragrant Woodruff, and these by the more sombre colouring of the Bugle. Then come the creamy white flowers of the Helleborine, the dull livid spikes of the Bird's-nest Orchis, and the blue Forget-me-nots giving place to a galaxy of summer flowers, brightening in later months into the brilliant yellow of the Ragworts and purple of the Foxgloves.

The grassy downs too in spring are resplendent with the Milkwort in all its purity of colour, whether of that typical blue which rivals the Swiss gentian in beauty, or fading into white or blushing to pink; while mixed with the Milkwort, and if yielding to it in loveliness yet excelling it in floral display, are brilliant patches of the rich orange yellow Hippocrepis. Later on appear the rosy crimson spikes of the Pyramidal Orchis, and the pale lemon flowers of Lady's Fingers, and the drooping blue flowered Campanula. The arable land seems scarcely besmirched with cultivation; even there glitter bright masses of Yellow Mustard that warrant the Laureate's simile of the knight's shield which "Shone far off as shines a field of charlock in the sudden sun between two showers." And if perchance the land have remained fallow, the bright flowers of Iberis, sometimes suffused with rich purple, the glaucous foliage of rare Fumarias, the deep crimson petals of the hybrid poppy, the bright rosy pink spikes of Sainfoin and Yellow Toad-flax, combine to form a varied show.

And, as for the hedgerows, as George Eliot says, "it was worth

the journey only to see those hedgerows, the liberal homes of unmarketable beauty," covered as they are with tangled masses of Traveller's joy, and formed of white beam which a puff of wind whitens as you look, intermingled with the dark foliage of the true cherry, the glossy spinous-leaved holly, and "starred with pale pink dog-roses." The Tertiary-covered commons are rich with a profusion of Blackberries in almost endless variety, over which hover such multitudes of Scarlet Admirals and Painted Ladies that the place seems full of sentient life. In other places these commons are covered with sweet short turf of brightest green in which hide the aromatic Chamomile, the smallest trefoil, and heath galium, or again glow as the golden furze takes possession and forms a prickly mass whose continuity is here and there broken by some small pond with its surface covered with the large white flowers of the water buttercup. In addition to the charm exerted by the great variety of flowers is the pleasure of seeing the scattered cottages with their kind and pleasant inhabitants, free from the squalor of too many of our villages, and enjoying rude health in this purest air.

Plants occurring on the **Lower Chalk** from **Mongewell to Princes Risboro**, including the north side of the Chalk escarpment.

Papaver hybridum, *Fumaria densiflora*, *parviflora*, & *Vaillantii*, *Arabis hirsuta*, *Alyssum calycinum*, *Thlaspi arvense*, *Iberis amara*, *Riseda lutea*, *Helianthemum vulgare*, *Viola mentita*, *Polygala vulgaris*, *P. calcarea*, *P. oxyptera*, *Cerastium arvense*, *Alsine tenuifolia*, *Hypericum angustifolium*, *H. montanum*, *Genista tinctoria*, *Anthyllis*, *Hippocrepis*, *Onobrychis*, *Prunus Cerasus*, *Poterium muricatum*, *Spiræa Filipendula*, *Rosa micrantha*, *aspernata*, *foetida*, *subglobosa*, *mollissima*, *Sorbus Aria*, *S. Aucuparia*, *Pyrus communis*, *Sedum Telephium*, *Saxifraga granulata*, *Sambucus Ebulus*, *Galium Cruciata*, *G. erectum*, *Asperula cynanchica*, *Valerianella dentata*, *Centaurea decipiens*, *Anthemis arvensis*, *Filago spathulata*, *Cineraria campestris*, *Inula Conyza*, *Erigeron acre*, *Picris*, *Campanula glomerata*, *Specularia*, *Monotropa hypopithys*, *M. hirsuta*, *Gentiana germanica*, *G. Amarella*, *Atropa*, *Verbascum nigrum*, *Linaria repens*, *Veronica montana*, *Chlora perfoliata*, *Linaria vulgari-striata*, *Orobanche elatior*, *O. minor*,

Verbena, *Origanum*, *Calamintha Acinos*, *Stachys arvensis*, *Galeopsis Ladanum*, *Echium*, *Plantago intermedia*, *Daphne Laureola*, *Thesium*, *Carpinus Betulus*, *Juniperus*, *Orchis pyramidalis*, *ustulata*, *militaris*, *Simia*, *Gymnadenia conopsea*, *Habenaria viridis*, *H. bifolia*, *Herminium*, *Ophrys apifera*, *O. muscifera*, *Neottia*, *Cephalanthera pallens*, *C. ensifolia*, *Ruscus*, *Luzula Forsteri*, *L. maxima*, *Carex divulsa*, *pilulifera*, *præcox*, *glauca*, *Phleum nodosum*, *Milium*, *Avena pubescens*, *pratensis*, *Koehleria*, *Triticum caninum*, *Elymus europeus*.

The district on the **summit of the Chilterns**, from **Bledlow to Goring**, gives in addition to many of the above:—*Ranunculus peltatus*, *truncatus*, *floribundus*, *parviflorus*, *Helleborus viridis*, *Aquilegia*, *Barbarea intermedia*, *Viola canina*, *Sagina ciliata*, *Montia*, *Hypericum montanum*, *Androsæmum*, *Malva moschata*, *Tilia parvifolia*, *Geranium columbinum*, *Ilex*, *Euonymus*, *Ulex Gallii*, *Poterium muricatum*, *Rubus plicatus*, *ramnifolius*, *R. thyrsoides*, *leucostachys*, *amplificatus*, *Sprengelii*, *Bloxamii*, *rudis*, *Radula*, *Koehleria*, *pallidus*, *Rosa sabini*, *R. rubiginosa*, *Mespilus*, *Sorbus Aria*, *Peplis Portula*, *Helosciadium inundatum*, *Pimpinella major*, *Adoxa*, *Tanacetum*, *Saponaria*, *Filago apiculata*, *Antennaria dioica*, *Anthemis nobilis*, *Bidens cernua*, *Solidago Virgo aurea*, *Centaurea decipiens*, *Hieracium tridentatum*, *boreale*, *umbellatum*, *Campanula Trachelium*, *Vaccinium Myrtillus*, *Erica cinerea*, *Calluna*, *Pyrola minor*, *Monotropa*, *Chlora*, *Digitalis*, *Antirrhinum Orontium*, *Pedicularis sylvatica*, *Melampyrum pratense*, *M. latifolium*, *Mentha pulegium*, *Ballota ruderalis*, *Teucrium Scorodonia*, *Myosotis umbrosa*, *Lycopsis arvensis*, *Rumex acutus*, *Daphne Mezereum*, *Taxus*, *Potamogeton serratus*, *Epipactis violacea*, *media*, *Iris foetidissima*, *Narcissus Pseudo Narcissus*, *Galanthus nivalis*, *Convallaria*, *Ruscus*, *Ornithogalum umbellatum*, *Allium vineale*, *Juncus supinus*, *Carex pseudo divulsa*, *Melica*, *Avena caryophyllæ*, *A. præcox*, *Poa nemoralis*, *Festuca ovina*, *Brachypodium pinnatum*, *Triticum caninum*, *Elymus*, *Blechnum*, *A. Ruta-muraria*, *A. Filix fœmina*, *Aspidium angulare*, *A. aculeatum*, *A. Borreri*, *A. affine*, *Botrychium*, *Lycopodium clavatum*, *Littorella*, *Nitella opaca*, *Equisetum palustre*, *subnudum*, *Aspidium spinulosum*, *dilatatum*, *Ophioglossum*.

The southern side of the Chilterns, with **Binfield Heath** and

similar Tertiary deposits, yields *Radiola linoides*, *Scutellaria minor*, *Centunculus*, *Potamogeton polygonifolius*, *Nardus stricta*, *Anthoxanthum Puellii*, *Erica tetralix*, *Ulex nanus*, *Carex Pseudo Cyperus*, *Bidens cernua*, *Veronica scutellata*, *Anthemis nobilis*, *Aira flexuosa*, *caryophyllea*, *præcox*, *Dianthus Armeria*, *Carex flava minor*, *Hornschuchiana*, *echinata*, *Viola lactea*, *Ranunculus hederaceus*, *R. penicillatus*.

By the river occur *Leucojum æstivum*, *Ornithogalum umbellatum*, *Callitriche obtusangula*, *Bidens cernua*, *Enanthe fluviatilis*, *Hydrocharis*, *Pedicularis palustris*, *Chara Hedwigii*, *Lysimachia vulgaris*, *Stellaria palustris*, *Salix purpurea*, *Ceratophyllum*, *Cuscuta europæa*, *Smyrnum*, *Enanthe crocata*.

METEOROLOGY.

Rainfall. From 34 years' observations, made at the Oxford Observatory from 1851-1884 inclusive, the mean yearly rainfall is shown to be 26·42 inches. The driest year being 1874, with 17·564 inches; the wettest 1852, with 40·416 in. The maximum monthly fall was Oct. 1875 with 7·531 inch: the minimum Sept. 1865, 0·176.

Monthly Mean of 34 yrs. obs. Max. Monthly Fall. Min. Monthly Fall.

January	2·33 inch	5·451	1852	0·272	1855.
February	1·64 „	3·744	1883	0·279	1862.
March	1·62 „	5·462	1862	0·413	1854.
April	1·72 „	3·926	1882	0·410	1855.
May	1·99 „	4·971	1878	0·430	1871.
June	2·59 „	7·087	1852	0·658	1870.
July	2·63 „	6·098	1880	0·470	1864.
August	2·44 „	5·120	1878	0·494	1880.
September	2·59 „	5·838	1876	0·176	1865.
October	2·81 „	7·531	1875	0·733	1879.
November	2·16 „	7·142	1852	0·460	1855.
December	1·90 „	5·103	1876	0·418	1876.

The mean yearly amount of cloud for 32 years' observations is 7·1.

Temperature.

The mean yearly reading of the **Barometer** for the last 30 years is 29·720; varying from 29·785 in 1858 to 29·572 in 1872.

The mean yearly reading of the **Dry-bulb Thermometer** from 1855 to 1884—30 years—is 49.19. The highest yearly reading being 51.43 in 1868, the lowest 44.55 in 1879.

	<i>Mean Monthly Reading for 30 yrs.</i>	<i>Max. Monthly Reading.</i>	<i>Min. Monthly Reading.</i>
January	38.82 inch	44.8 1884	30.3 1881.
February	40.37 "	46.2 1869	29.5 1855.
March	41.87 "	46.1 1859	36.9 1883.
April	47.29 "	52.0 1865	42.5 1860.
May	52.38 "	57.4 1868	48.0 1855.
June	58.61 "	63.8 1858	55.1 1860.
July	61.72 "	66.5 1859	56.8 1879.
August	61.00 "	64.6 1884	57.1 1860.
September	56.47 "	61.7 1865	52.3 1860.
October	49.90 "	54.4 1861	44.8 1881.
November	42.52 "	49.2 1881	37.8 1871.
December	39.77 "	46.1 1868	32.8 1874, 1878.

The mean yearly reading of the **Wet-bulb Thermometer** for 30 years' observations is 46.41; varying from 44° in 1879 to 47.95 in 1857.

	<i>Mean Monthly Reading for 30 yrs.</i>	<i>Max. Monthly Reading.</i>	<i>Min. Monthly Reading.</i>
January	37.53 inch	43.1 1884	29.2 1881.
February	38.79 "	43.1 1867, 1872	29.5 1855.
March	39.50 "	43.0 1882	34.4 1883.
April	44.00 "	48.8 1865	39.6 1860.
May	48.40 "	52.8 1868	45.2 1855.
June	54.35 "	57.3 1871	51.2 1866.
July	57.22 "	61.3 1859	53.9 1858.
August	56.87 "	59.5 1867	54.2 1862.
September	53.47 "	58.3 1865	49.5 1877.
October	47.75 "	51.7 1861	42.3 1881.
November	40.70 "	44.5 1857	35.6 1871.
December	38.43 "	44.0 1857	31.5 1870.

The general yearly mean of **Ozone**, from 15 years' observations, 1867–1881 inclusive, is found to be 2.5. The yearly sum of **bright sunshine** in 1881 was 1546.8 hours.

For further details enquirers are referred to the Meteorological Observations made at the Radcliffe Observatory by E. J. Stone, M.A., F.R.S., etc., and to Symon's British Rainfall.

PLAN OF THE FLORA.

THE following pages are devoted to the Flowering Plants and Ferns of Oxfordshire, and that portion of Berkshire which is contiguous to and included in the Thames Valley. The plants are arranged according to the Natural System, the nomenclature and arrangement being essentially that adopted by Nyman in his *Conspectus of the European Flora*, to which, however, slavish adherence has not been kept, nor must that author's idea of species be held in all cases to coincide with English views. When Nyman's name of a plant differs from that adopted in Hooker's *Student's Flora*, 3rd edit., or Babington's *Manual*, the names given in those works are usually quoted as synonyms.

No description of the plants enumerated is given since the two excellent floras above quoted and Boswell Syme's *English Botany* render this quite unnecessary, but should the plant exhibit any local peculiarity, such will be noticed, as well as any point to which it seems well to draw special attention.

The Natural Orders and Genera are printed in large and bold capitals, the names of the species in Egyptian type. When the plant possesses an English, and especially a local name, it follows the Latin one, but mere translations of the scientific names are purposely avoided. Under these names come the synonyms alluded to above, printed in italics. Then come references to *Topographical Botany*, ed. ii., to *English Botany* and Nyman's *Conspectus*. The plates of *English Botany* are quoted, and also those of Baxter's *Phænogamous Botany*, many of the latter being presumably drawn from local plants. For the *Characeæ*, Messrs. Groves' monograph is also employed.

The next paragraph contains, first, the grade of citizenship of the plant in the county, i.e. native, denizen, alien, etc.; second, its habitat, i.e. hedgerows, meadows, etc.: this refers to the Oxfordshire (not to the British) stations; third, the time of flowering, which again has only local reference.

Under these comes the first record as an Oxford plant, with name of the recorder, the date, and the name under which it was recorded. The record may be a printed or written one, published or unpublished; it may be a dried specimen, or from a MS. entry in a book, etc. Although extreme pains have been taken to ensure the earliest record being quoted, it is possible that subsequent research may in a few instances discover some that are earlier.

Then follow the localities, arranged according to the river districts:—

1st.	Those localities drained by the Stour.	
2nd.	"	Ouse.
3rd.	"	Swere, or Upper Cherwell.
4th.	"	Ray, or Lower Cherwell.
5th.	"	Isis, or Upper Thames.
6th.	"	Thame, Mid Thames.
7th.	"	Thames, or Lower Thames.

Under these come a few Berkshire localities, drawn principally from the portion of Berkshire nearest to the Oxford border. When the plant occurs in one to four of the border counties, they are quoted for it, but not when it occurs in *all* of them.

The Author is responsible for all the records to which no recorder's name is attached, and a note (!) after a record signifies the Author has seen the plant in the locality it follows. All records given on other than personal authority have that authority printed in *italics*; occasionally several botanists have recorded a plant from the same locality; in such a case, priority of discovery has the preference. When a plant is very rare, the date of the last record is added.

After these records is a paragraph devoted to local peculiarities of structure, distribution, etc.

The Botanologia of the County, with short biographies of the various Botanists who have worked at the Oxford Flora, with the principal additions they made to it, is given at the end of the Flora proper.

LIST OF BOOKS, MSS., ETC., QUOTED IN THE FLORA.

- Annals and Magazine of Natural History*, 1st series, 1841–1847; 2nd series, 1848–1857; 3rd series, 1858–1867; 4th series, 1868.
Bot. Ex. Club rep. Botanical Exchange Club Reports.
Bot. Rec. Club rep. Botanical Record Club Reports.
Bab. Man. Manual of British Botany. C. Cardale Babington, M.A., F.R.S. Ed. vii.
Bab. Br. Rubi. The British Rubi. C. C. Babington. Lond. 1869.
Bx. Phænogamous Botany. W. Baxter, A.L.S., Oxford. 6 vols. 1834–1843.
Bx. MSS. Notes in a copy of Ray's Synopsis.
 " " " Sibthorp's Flora Oxon.
Bx. Stirp. Stirpes Cryptogamæ Oxonienses. Oxford, 1825.
Bot. Guide. The Botanist's Guide through England and Wales. Dawson Turner, and L. W. Dillwyn. Lond. 1805.
Bees. The History of the neighbourhood of Banbury, with a sketch of the Geology furnished for Mr. Alfred Beesley's History of Banbury, by Thos. Beesley, p. 571–599. Lond. 1841, 20th Dec.

- Blacks. Sp.* Specimen Botanicum quo Plantarum plurium rariorum Angliæ indigenarum loci natales illustrantur. J. Blackstone. Lond. 1746.
- Blacks. MSS.* Notes from MSS. in vol. 317 Herb. Sloane, Brit. Mus. circa 1734. (Kindly copied for me by Rev. W. W. Newbould.)
- Blackwall. A.* Herbal. Eliz. Blackwall. 2 vols. 1759.
- Brit. Phys.* Botanologia; the British Physician. Robt. Turner. Lond. 1664.
- Bos. H.* Boswell. Oxford notes. See Phytol. n.s. 1860, p. 99.
 „ Mosses, Phyt. n.s. 1860, p. 344-369; 1861, p. 262.
 „ „ Journ. Bot. 1872, p. 363; 1861, p. 262.
- Coles.* Adam in Eden. By Wm. Coles. Lond. 1657.
- Curtis.* British Grasses. By Wm. Curtis. „ 1790.
 „ Flora Lond. „ „ 1777-1798.
- Cyb. Br.* Cybele Britannica. Hewett Cottrell Watson. 4 vols. 1847-1859.
- Comp. Cyb.* Compendium. „ „ Lond. 1870.
- Cyb. Br. Sup.* Supplement. „ „ „ 1860.
- Daubeny.* Spec. of a proposed Index to the Oxford Flora in Walker's Flora of Oxfordshire. By Ch. Daubeny. 1834.
- Daubeny.* Guide to the Oxford Botanic Garden. Ed. i. 1850; ed. ii. 1853; ed. iii. 1864.
- Daub. MSS.* MS. records of plants preserved in Bib. Hort. Ox. By Ch. Daubeny. 1837-1842.
- De Candolle A. P. et Alphonse.* Prodromus systematis naturalis regni vegetabilis. Paris, 1824-1873.
- Dill.* Ray's Synopsis, ed. iii. (J. Dillenius).
 „ *Hb.* Herbarium in Hort. Ox.
 „ *H. Elth.* Hortus Elthamensis. Joan Jacobo Dillenio. Lond. 1752.
 „ *Hist. Musc.* Historia Muscorum, „ „ Oxon. 1741.
- Dyer.* Notes on plants of the neighbourhood of Oxford. Journ. Bot. vol. ix. 145-148. By W. Thiselton Dyer. May 1871.
- E. B.* English Botany. James Edward Smith, M.D. 36 vols. Lond. 1796-1814.
- E. B. Syme.* See under Syme.
- E. B. Supp.* English Botany. Supplement to. 1831-1863.
- Evelyn.* The Sylva, or Forest Trees. John Evelyn. 1776.
- Fl. Berks.* Contributions to a Berkshire Flora. J. Britten, 1871.
- Fl. Middlesex.* Flora of Middlesex. Henry Trimen and W. T. Thiselton Dyer. Lond. 1869.
- Fl. Northants.* Flora of Northamptonshire. G. Claridge Druce, in Proceedings of the Northamptonshire Natural History Society. 1880, et sequente.

- Fl. Oxon.* See Sibth. and Walker.
- Fl. Warwick.* Flora of Warwickshire, in *Midland Naturalist*. James Bagnall, 1880, and in progress.
- Fr.* MS. contribution to a Flora of Oxfordshire by Alfred French. See preface. Sometimes quoted as *H. A. F.* Herb. Alf. French. Now preserved in the British Museum (Natural History).
- Ger.* The Herball. John Gerarde. Lond. 1597.
- Gard. Mag.* Gardener's Magazine, July 1836, p. 371. Lond. 1850-1851.
- Gard. Chron.* Nov. 4, 1871.
- Gough's Camden.* Gough's Edition of Camden's Britannia, ed. ii. 1806, etc.
- Groves, H. and J.* The Characæ. See *Journ. Bot.*
- Gull.* A Catalogue of plants collected in the neighbourhood of Banbury, by Geo. Gulliver, F.R.S., F.G.S. Lond. 1841.
- Hall.* The Book of the Thames. Mr. and Mrs. S. C. Hall. Lond. 1859.
- Hook. B. Fl.* The British Flora. Sir W. J. Hooker. Lond. 1830-1835-1838-1842.
- „ *St. Fl.* The Student's Flora. Sir J. D. Hooker, ed. ii. 1870; ed. iii. Lond. 1884.
- How.* Phytologia Britannica. [W. How.] Lond. 1650.
- Huds.* Flora Anglica. Gulielmus Hudsoni, F.R.S. Lond. 1762.
- Journal of Botany.* Lond. 1863, and in progress.
- „ *Horticulture.* Nov. 9, 1871, etc.
- Johns, Ger.* The Herball, etc., by John Gerarde; very much enlarged by Thomas Johnson. Lond. 1633.
- „ *Merc.* with MS. notes by Blackstone, etc., in the possession of Mr. W. Pamplin.
- Knapp.* Gramina Britannica. J. L. Knapp, F.L.S. Lond. 1804.
- Lawson.* Oxford Botanists, paper on, in *Gardener's Chronicle*, by Prof. M. A. Lawson, July 30, 1870.
- Leslie.* Our River, by G. F. Leslie.
- Light. MSS.* Notes by Dr. John Lightfoot, in a copy of the Dillenian Ray in Bib. Hort. Oxon.
- Light. MSS.* Notes by Dr. John Lightfoot, in Hudson's Flora Anglica in Bib. Hort. Oxon.
- Linn. Soc. Journ.* Journal of the Linnean Society, 1857, et sequente.
- „ *Trans.* Transactions of „ „ 1791 „
- „ *Sp. Pl.* Species Plantarum Caroli Linnei. Holmiæ, 1762.
- Lowe.* A Natural History of British Grasses. Edw. J. Lowe, 1858.
- Masters.* Maxwell T. Flowering Plants and Ferns of Oxfordshire. Rep. of Ashmolean Soc. Oxford, 1857.
- Mag. Nat. Hist.* The Magazine of Natural History, 9 vols. 1829-1836.
- „ „ „ „ 4 „ 1837-1840.
- Merrett.* Pinax Rerum Naturalium Britannicum. Christopher Merrett. Lond. 1666.
- Midland Naturalist.* 1878, and in progress.

- Mor. Umb.* Plantarum Umbelliferarum distributio nova. Robert Morison. Oxon. 1670.
- Mor. Hist.* Plantarum Historia Universalis Oxoniensis. Pars ii. 1680; pars iii. 1699; edited by Jacob Bobart. The first part was never published; it exists in MS. at Oxford.
- Mor. Hb.* The Herbarium of Morison in Hort. Ox.
- New B. Guide.* The New Botanist's Guide to the localities of the rarer plants of Britain. H. C. Watson, vol. i. 1835; vol. ii. 1837.
- Newman.* A history of British Ferns and allied plants. Edward Newman, F.L.S. Lond. ed. iv. 1865.
- Nym.* Conspectus Floræ Europææ. Carolo Frider Nyman. Orebro Sueciæ, 1878.
- Oxford Botanical and Natural History Society's report of Oxford, 1832.
- Park. Par.* Paradisi in Sole. [John Parkinson.] Lond. 1629.
- „ *Th.* Theatrum Botanicum. John Parkinson. Lond. 1640.
- Parn.* The Grasses of Britain. Richard Parnell, M.D., 1845.
- Plot.* The Natural History of Oxfordshire. Robert Plot, LL.D. (misprinted 1765 in Sibthorp). Oxford 1677.
- Phyt.* The Phytologist, conducted by G. Luxford, June 1841 to July 1854.
- Phyt. N. S.* The Phytologist, new series, conducted by A. Irvine, 1855-1863.
- Purt.* The Midland Flora. T. Purton, vol. ii. 1817; app. 1821.
- Pamplin, W., A.L.S.* Notes on Plants about Goring. Phyt. v. 153.
- Pryor, R.C.* On the popular names of British Plants. Lond. 1870.
See Oxford Magazine.
- Ray. Cat.* Catalogus Plantarum Angliæ. Joannis Raii. Lond. 1670.
- „ *Fasc.* Fasciculus Stirpium Brit. 1688.
- „ *Hist.* Historia Plantarum, vol. i. 1686; vol. ii. 1688.
- „ *Syn.* Synopsis Methodica Stirpium Brit., ed. i. 1690; ed. ii. 1696.
- „ „ „ „ ed. iii. [J. J. Dillenius,] 1724.
- Rees.* Encyclopedia. Abraham Rees. 39 vols. 4to. Lond. 1814 (Botanical notes by Sir J. E. Smith).
- Reich.* Iconographia Botanica Ex H. S. L. Reichenbach. Lipsiæ, 1827.
- „ *Fl. Germ.* Flora Germanica, exc. L. „ „ 1830.
- „ *Ic.* Icones Floræ Germ. et Helv. L. et H. G., 1834-1867.
- Richardson.* Correspondence of, edited by Dawson Turner.
- Robertson's* Environs of Reading; a list of unlocalised plants in, by T. B. Flower.
- Saunders, W. Wilson,* F.L.S. List of a few rare or interesting plants noticed in the neighbourhood of Kirtlington, Oxon., p. 239-242. May 1839. Mag. Nat. Hist. n. s. vol. iii.
- Sib. or Sibth.* Flora Oxoniensis. J. Sibthorp, M.D., Oxon., 1794.
„ With MS. notes by J. Sibthorp.

- Sibth. Flora Oxoniensis.* With MS. notes by the Rev. W. N. Newbould.
 " " Dr. Williams.
 " " W. Baxter.
 " " R. Walker.
Sm. Fl. Br. Flora Britannica. J. E. Smith, M.D., 1800-1804.
 „ *Eng. Fl.* The English Flora. „ 1824-1828.
Sole. Menthæ Britannicæ. Wm. Sole. Bath, 1798.
Syme, E. B. English Botany. John. T. Boswell Syme. Ed. iii. Lond. 1-12.
Turner Hb. William Turner's Herball, 1551-1566.
 „ *N. The Names of Herbes in Greke, etc.* W. Turner, 1548.
 Reprint of do., 1882.
Top. Bot. Topographical Botany. H. C. Watson. 2 vols. 1873-1874.
 " " " " 2nd ed. Edited by J. G. Baker and
 Rev. W. W. Newbould, M.A. Lond. 1883 is the edition quoted.
Watson, H. C. See *Cyb. Br. Comp. Cyb. etc. Top. Bot. New Bot. Guide.*
Walk. Flora of Oxfordshire and its contiguous counties, by Rich. Walker, B.D., F.L.S. Oxf. 1833.
 Do. with MS. notes by the Author, M. T. Masters, R. Pryor, and T. Thurland.
With. A Botanical arrangement of British plants, by W. Withering, M.D., F.R.S. 2 vols. 1776, and 7 other editions to 1840.

PRINCIPAL HERBARIA CONSULTED.

- The Herbarium, British Museum. *Hb. Br. Mus.*
 „ Sir Jos. Banks. *Hb. Banks.*
 The General Herbarium, Oxford Gardens. *Hb. Ox.*
 The Herbarium, British Gardens. *Hb. Lawson.*
 „ Dillenius'. *Hb. Dill.*
 This was the collection made by Dillenius in the preparation of the Synopsis.
 The Herbarium collected by W. Sherard. *Hb. Sher.*
 This is also kept separate; there are few localities.
 The Herbarium formed by Morison and Bobart in the preparation of *Historia Oxon.* *Hb. Morison.*
 The Herbarium of the Rev. R. Linton. *Hb. Linton.*
 „ „ Pharmaceutical Society. *Hb. Ph. Soc.*
 „ „ Henry Boswell. *Hb. Bos.*
 „ „ Bolton King.
 The Herbarium of W. Baxter, now incorporated with the British collection in the Oxford Gardens. *Hb. Bx.*
 The Herbarium of Mr. W. Whitwell and the Author's own collection.
 The Herbarium of the late H. C. Watson, now preserved at Kew.

LIST OF THE PRINCIPAL PERSONS WHO HAVE CONTRIBUTED NOTES OR RENDERED ASSISTANCE IN PREPARING THE FLORA.

- Albright, J.* Charlbury. Local notes.
Alpin, O. V. Banbury. „
 „ *Rev. D'Oyley.* Chinnor. „
Beesley, T. Banbury.
Baker, J. G., F.R.S. Kew.
Bennett, Rev. F., M.A. Oxford. Oxford, and Dorchester, notes and much general help.
Babington, Prof. C. C. Cambridge. Critical assistance.
Barnes, Rev. J. Dorchester. Local notes.
Baxter, W. H. Oxford. Loan of his father's—Mr. W. Baxter—MSS.
Bennett, Arth., F.L.S. Croydon. Critical help.
Britten, J., F.L.S. British Museum. Berkshire list, etc.
Boswell, H. Oxford. Valuable list of Oxford and Berkshire localities.
 „ *Dr. J. T.* Kirkcaldy. Critical help.
Dashwood, Sir H. Kirtlington. Local notes.
Davies, Mrs. Sheepstead House. Notes about Swerford.
French, Alf. See preface.
Fox, Rev. E. Upper Heyford. Local and general notes—many records.
 „ *Rev. H. E.* Durham. Oxford notes.
Fry, E., B.A. Bristol. Bicester notes.
Groves, H. & J. London. Critical help and references.
Garnsey, H. E., M.A. Oxford. Plants noticed about Oxford, and other assistance.
Gough, Mrs. Souldern. Local notes.
Hopkins, T. Magd. Coll. Notes about Nuffield.
King, Bolton, B.A. London. Many records and other assistance.
 „ *F.* „ Oxford notes.
Lees, F. Arnold, F.L.S., etc. Notes of the Reading district, etc.
Lester, L. Summertown. Local notes.
Newbould, Rev. W. W., M.A. Kew. Loan of books and Oxfordshire notes, with characteristic kindness.
Oxford, The Curators of the Botanic Gardens, for allowing examination of Herbarium, and reference to Library, etc.
Pattison, Rev. Mark. Oxford notes.
Pamplin, W., A.L.S. Corwen. Loan of books and local notes, and other kind assistance.
Patey, Mr. W. Oxford. Banbury notes.
Ridley, H., M.A. Brit. Museum. List of Oxford plants.
Richards, F. T., M.A. Trin. Coll. Many records, and general assistance.

- Rogers, R.* Woodstock. Local notes.
Robertson, Rev. A. Durham. Oxford localities.
Selborne, The Earl of. Oxford notes.
Smith, Rev. F. Oxford. Local notes.
Taunton, Mrs. Freeland. „
Taylor, Miss Beatrice. Aston Rowant House. List of Fungi.
Thurland, Mr. Oxford. Local Notes.
Woods, J., F.L.S., etc. Oxford plants.
Whitwell, W. Oxfordshire and Berkshire localities.

ABBREVIATIONS AND SIGNS USED IN THE FLORA.

In addition to the abbreviations given in the list of works quoted, the following are also employed:—

- A. Annual.
 A. Fr. or Fr. Alfred French.
 B. Biennial.
 Betn. Between.
 Cult. Cultivated.
 Dis. District.
 Fl. Flowers or Flora.
 Hb. Herbarium.
 Nr. Near.
 Obs. Observation.
 P. Perennial.
 Var. Variety.
 T. Tree.

[]. Localities enclosed in brackets are those in which the plant is now probably extinct. A plant notice in brackets means at present the plant is not on record for Oxon.

! suggests some mistake has been made with reference to the record it follows; or that the plant is probably extirpated; or before the name of a plant doubts as to its being correctly named, etc.

! after a locality means that the Author has seen the plant growing there; this sign is only used when the plant is rare, or the record seems to require confirmation.

* before the name of a plant signifies the plant is not indigenous.

** before the name of a plant means the plant is only of casual occurrence, or is planted in the county.

FLORA OF OXFORDSHIRE.

CL. I. *DICOTYLEDONES.*

ORD. I. *RANUNCULACEÆ. Jus.*

CLEMATIS. L.

Clematis Vitalba, L.

Common Traveller's Joy.

Top. Bot. 1. Bx. 129. Nym. 1. Syme, E. B. plate i. vol. i. p. 2.

Native. Shrub. Hedgerows, waste places. July-September.

First record, *Sib.* 1794, 'Hedges.'

2. Ouse. Cottisford, Ardley.

3. Swere. Wykeham Tollgate, *F. French.* Swerford, South Newington, *A. Fr.* Great Tew, *Beesley.*

4. Ray. Middleton Stoney, *Rogers.* Woodstock to Kirtlington, *H. Bos.* About Stow Wood, Bletchingdon, Gibraltar Rocks very fine, near Elsfield, abundant by canal-side near Kirtlington.

5. Isis. Minster Quarries, *Bx.* Charlbury, Freeland, Stonesfield, Handborough, Shipton under Wychwood, Wilcote, near Ashford Mills fine, Lyneham.

6. Thame. Burcott, *Mrs. Blunt.*

7. Thames. Goring, *W. Pamplin.* Ibstone, Stokenchurch, profusely, *A. Irvine.* Entire-leaved form at Goring, *Newbould.* Watlington, *H. Bos.* Caversham, *A. Fr.* Bledlow, Mongewell, Nettlebed, Henley Park Hill, very fine.

Berks. Cumnor, abundant about Pangbourne, and generally distributed on the Chalk. Occurs in all the divisions of Britten's Berks Flora.

It is rare or absent in the immediate vicinity of Oxford (common about Oxford, *Bart. Br. Pl.*); absent on the Oxford Clay and Kimmeridge Clay; not frequent on the Gault; abundant on the Oolite and Chalk.

The entire-leaved form occurs not unfrequently. *M. Cl. Gandoger,* in the *Flore Lyonnaise*, describes several species which however seem to have little to distinguish them.

PULSATILLA. Mill.**P. vulgaris, Mill.** *Pasque flower.**Anemone Pulsatilla*, L. Top. Bot. 4. Syme, E. B. 1. 9. 9. Nym. 2. Native. Rare. Probably extinct. P. April–May.First record, 'It groweth about Oxford, as my friend Falconer told me.' *Turner's Herball*, 1551.

5. *Isis*. Several parts of Cornbury Park, nr. Wychwood, *Blackstone*, 1746. Wychwood Forest, Burford Downs, *A. pratensis*. *Sib. Fl.*

The place on Burford Downs is in the road between Burford and Cirencester, with *Cineraria campestris* and *Astragalus*. *Dr. Lightfoot's MSS.* In plenty on Burford Downs, in Oxon, by the relation of the Rev. Mr. Griffith, of Pemb. Coll. *MSS. in Dill. Ray. in Hort. Ox., by Mr. Dickson.* Upon the Cotteswolds, nr. Black Bourton very plentifully, *Coles' Adam in Eden*. Lyneham Camp, *T. Bees*.

Berks. Unhill and Yew Tree Downs, *Compt. Hist.* Ilsley Downs, *H. Bos.* Downs between Moulsoford and Unwell Wood!

In Northants it occurs on Barnack Quarries and in Gloster.

Prof. Sibthorp referred our Oxford plant to *A. pratensis*. See *With. Br. Pl. ed. v. p. 612*, but Blackstone's specimens in Hort. Ox. are identical with *A. Pulsatilla*.

The Burford locality is now brought under cultivation, and the plant is certainly extinct there. I have been unable to find it in Cornbury Park, where it should still occur, as little change has taken place there during the last century; from the quarries it has certainly disappeared. It is somewhat singularly absent from the northern grassy slopes of the Chalk downs. It may reward the searcher on the downs of Swincombe or Ewelme.

ANEMONE. L.**A. nemorosa, L.** *Wood Anemone, Wind flower.*

Top. Bot. 4. Syme, E. B. i. 12. 11. Bx. Br. Pl. 43. Nym. 3.

Native. Woods, hedge banks, rarely meadows; generally distributed. P. Mar.–May.

First record, *Wm. Coles' Adam in Eden*. Stow Wood, 1657.

2. *Ouse*. Tusmore Wood, Ardley Wood.

3. *Swere*. Wroxton Wood, *Gull*. Broughton, *Bees*. Hanwell, Hardwick, *T. Bees*.

4. *Ray*. Blackthorn Wood, Stow Wood, Noke Meadows, red flowers; Bucknell.

5. *Isis*. Wychwood, Stonesfield, Handborough, Wilcote, Ditchley.

6. *Thame*. Shotover with *Æcidium leucospermum Bz.*, with dark red petals; on north side of Shotover in grassy ground; the roots

sometimes attacked by *Peziza tuberosa*, which is very destructive to them, *Bx. MSS.* Nuneham, sometimes purple flowers, *H. Bos.* Chalgrove, *Hb. Dill.*

7. **Thames.** Most abundant in Chinnor and Goring Woods, and Penley Hangings, etc.

Berks. Abundant in Bagley Wood, Boar's Hill, Cumnor, Tubney, etc.

The *Dillenian Ray* record is as follows :—

Filix lobata globulis pulverulentis undique aspersa. Singularem hanc Filicem in Horto Siccio Bobartiano observavit D. Dillenius, cui Bobartus sua manu subscripserat. 'This capillary was gathered by the conjuror of Chalgrove.' Vicus est vii circiter milliaribus distans Oxonio. An tota planta vel ramulus saltem esset conjectari non licebat. Tali autem plane erat figura donata, qualis exhibetur, Tab. iii. Fig. 3. Pediculus ad folia usque levitur pilosus erat.

The leaf of the *Anemone* thus described as a new species of Fern, is still preserved in the Morisonian Herb. In a copy of the *Dillen. Ray* in Hort. Ox., a writer has inserted opposite the above description, 'This fern is no other than a leaf of *A. nemorosa* decorated on the under side with dots, occasioned by an insect laying its eggs there.' The so-called eggs being a Fungus, which we at present call *Puccinea anemonea*.

* * *Anemone ranunculoides, L.*

Alien. Cyb. Br. i. 75. Comp. 475. Syme, E. B. i. 13. 12. Nym. 3.

In a plantation, Kirtlington. Sir H. Dashwood informs me he brought the plant from Switzerland.

Berks. Field near Childrey Rectory, *Rev. G. F. de Teisser.*

Mr. Cornish informs me it is cultivated in the rectory garden.

* * *Anemone apennina, L.*

Alien. Syme, E. B. i. 12. 10. Nym. 3.

A plant was sent to the Oxf. Bot. Gard. by Mr. Wingfield, said to have been found in Wychwood Apr. 11, 1844. It was in flower, *Bx. MSS.* Broughton plantation; not wild, *T. Bees.*

Berks. In a copse near Shillingford, on the left hand of the lane from Hatford, after crossing the turnpike road; plentiful, *Mrs. Pearce, Bx.*

ADONIS. L.

* *A. autumnalis, L. Pheasant's Eye.*

Cyb. Br. iv. 80, Oxon (?). Syme, E. B. i. 14. 13. Bx. 7. Nym. 4.

Alien or colonist; cornfields; very rare. A. May (Sib.).

First record, Sib. 1794.

3. **Swere.** Lane between Broughton and Bloxham; very rare, *Bees.*

4. **Ray.** Cornfields betwn. Kirtlington and Bletchington, *W. W. Saunders.*

5. *Isis*. Cornfields near Observatory, *Sib*.

Berks. Yattendon, Frilsham, Hampstead Norris, *Newb. Pamplin*.
Near S. Hinksey, *Prof. Lawson*, 1870.

MYOSURUS. L.

M. minimus, L. *Mouse tail*.

Cauda muris, Ger. Top. Bot. 5. Syme, E. B. i. 15. 14. Bx. 204. Nym. 4.
Native. Agrestal. A. Ap.-July. Cornfields on damp soil; local
and rare.

First record, *Sib*. 1794.

3. *Swere*. North Aston, *Sib*.

4. *Ray*. Mag. Coll. walks near the meadow gate, *Sib*.; do. *Rev. E. Fox*.
In a field on left-hand side of road going from Bayswater to
Stanton S. John, *Bx*.

Berks. Cookham, *N. B. G.* Old Windsor, *B. G.* North Heath,
Newb. Radley. In Bucks, Northants, and Warwick.

THALICTRUM. L.

T. flavum, L. *Meadow Rue*.

Top. Bot. 3. Syme, E. B. i. 9. 8. Baxt. 254. Nym. 5.
Native. Paludal. P. Sides of rivers and ditches; local. May-July.
First record, *Sib*. 1794.

2. *Ouse*. Mixbury. *T. riparium*, Jord. Fl. du Cent. de Fr. ii. 5.

3. *Swere*. Banbury, S. Newington, *Gull*. Mill Meadow, Banbury,
Bees. Hanwell, Little Bourton, Turner's Meadow, *Hb. A. Fr*.
Upper Heyford, *E. Fox*.

4. *Ray*. Kidlington, *H. Bos*. Side of the Cherwell, The Parks, *H. E.*
Garnsey. Elsfield, Otmoor, Canal side nr. Kirtlington, Weston
peat pits.

5. *Isis*. South Leigh Common, *Sib*. Medley, Godstow, *H. Bos*.
Bruern, Eynsham, var. *Morisonii*, Binsey Lane, Port Meadow,
Stanton Harcourt, Radcot Bridge, Kelmscott.

6. *Thame*. Cowley, *Sib*. Iffley, *Hb. Br. Mus. Dyer*. Thame, *Hb.*
Bx. Meadows bet. Oxford and Iffley, *Bx. MSS.* Sandford to Nune-
ham, *H. Bos*. Dorchester, Chiselhampton. Very abundant in
meadows about Iffley.

7. *Thames*. Goring, *Newbould*. Ditch, Thames, west of Caversham,
F. A. Lees. Maple Durham, Sonning, North Stoke.

Berks. In meadows about Radley! *Bx*. Wytham, *E. Fox*. Long
Wittenham.

The fruits rarely mature, from the attacks of a gall insect, which thus
renders it difficult to decide upon the segregate name. *T. Morisoni*,

Reich. Ic. 4640, is the usual form. *T. riparium*, ditch side, Caversham, *F. Tufnail*.

Dr. Maxwell T. Masters refers in his paper on the Oxford Flora to the extinction of *Thalictrum majus*. I can find no trace of its having been recorded.

RANUNCULUS. L.

R. Ficaria, L. *Lesser Celandine, Pilewort.*

Ficaria verna Huds. Top. Bot. 11. Syme, E. B. i. 47. 39. Nym. 7. Native. Septal. Damp places. Common and generally distributed. P. March–June. First record, *Sib.* 1794. Unlocalised.

In all the districts; about Oxford with *Æcidium confertum* and *Uredo Ficariæ*, DC. Bx. MSS. var. *incumbens*, F. Sz. Mag. Col. Meadows, *Hb. Br. Mus. Dyer*, Kirtlington, Marston, etc. The common form is var. *divergens*, F. Sz., but the two vars. seem connected by a gradation of forms. Under the wall of Trinity garden is a form producing bulbils in the leaf axils above the ground: a similar form is noticed in the Flora of Middlesex, p. 17. The plant rarely produces seed. The leaves vary considerably in outline.

R. repens, L. *Creeping Buttercup.*

Top. Bot. 13. Syme, E. B. i. 40. 34. Nym. 11. Native. Agrestal. Viatical. P. Common and generally distributed May–August. First record, *Sib.* 1794. Unlocalised.

Has been noted in all the districts. Two forms—probably owing their difference to their localisation (i.e. shady ditches and damp meadows; and cultivated ground)—have been observed.

R. acris, L. *Buttercup, Meadow Crowfoot.*

Top. Bot. 13. Syme, E. B. i. 37. 33. Bx. 302. Nym. 13. Native. Pratal. P. Meadows, pastures, abundant. June–August. First record, *Sib.* 1794. Unlocalised.

Common in all the districts: two or more forms occur. A plant of the Chalk downs I suspect to be *R. Steveni*, Reich, from its elongated rootstock and a similar form has been noticed on dry sandy ground near Elsfield. The usual meadow plant is probably *R. tomophyllus*, Jord., a large, erect plant, with præmorse rootstock. A form with slightly double flowers of *R. Steveni* was noticed at Woodcote.

R. auricomus, L. *Goldilocks, Wood Crowfoot.*

Top. Bot. 12. Syme, E. B. i. 36. 32. Nym. 12. Native. Sylvestral. P. Woods, hedgerows, etc. Locally common. April–May.

First record, *Sib.* 1794. Unlocalised.

1. Stour. Tadmarton.

2. Ouse. Ardley, Mixbury, Hethe.

3. **Swere.** Banbury hedge, not common, *Bees*. Broughton, *E. Walford*. Somerton.
4. **Ray.** Stow Wood, *Mag. Col. Walks, Sib.* Marston, *R. Linton*. Water Eaton, Noke, Muswell Hill, Elsfield, *depauperatus*. Stow Wood, perfect flowers.
5. **Isis.** Tar Wood, *Sib.* Wychwood, *H. Bos.* Chipping Norton, Charlbury, Wilcote, Handborough, Chadlington.
6. **Thame.** Shotover, *Dr. Williams*, 1831. Very fine; in great abundance in a low pasture below the brick kilns on south side of Shotover, *Bx.* Nuneham, *H. Bos.* Littlemore.
7. **Thames.** Stokenchurch, *Bx. MSS.* Chinnor, Sunley Wood, Goring, Maple Durham.

Berks. Bagley, *H. Bos.* Tubney, Cumnor, Unwell Wood.

The glands at the base of the petals vary much in size; Mr. Grant Allen informs me that sometimes they are so much developed as to suggest the origin of tubular petals. Our Oxford plants do not exhibit this excessive gland development to the same extent as the Surrey specimens. The plant with imperfect petals is the more frequent form. The young lower leaves are strangely different from the upper ones.

R. bulbosus, L.* *Buttercup.

Top. Bot. 13. Syme, E. B. i. 41. 35. Nym. 13.

Native. Pascual. P. Common, meadows and pastures. May-July.

First record, *Sib.* 1794. Unlocalised.

Common in all the districts except the Stour. A plant with double flowers was found on Holton quarries. A starved form with blossoms about $\frac{3}{8}$ inch across and abortive stamens has also been seen on Cowley Marsh.

R. Lingua, L.* *Great Spearwort.

Top. Bot. 11. Syme, E. B. i. 35. 31. Nym. 13.

Native. Paludal. P. Banks of rivers. Local and rare. July, August.

First record, *Sib.* 1794.

4. **Ray.** Cherwell bank, Upper Heyford, *Rev. E. Fox*. Cherwell banks, near King's Mill, *Sib.* Cherwell side betn. Marston and Water Eaton.

5. **Isis.** Near Botley Bridge, *H. Bos.* Ditch by Folly Bridge, *Bx.* Extinct.

Berks. Abingdon, *H. Bos.* Cookham, *Phyt. i. o. s.* Oxford, *H. Bos.*

The rarity of this plant about Oxford and its absence on Otmoor is remarkable. The early leaves of this plant are oblong cordate. See Linn. Journal, vol. xxi. Not recorded from Gloucester. Rare in Northants.

R. Flammula, L.* *Lesser Spearwort.

Top. Bot. 11. Syme, E. B. i. 32. 28. Nym. 13.

Native. Paludal. P. Heaths, bogs, watery places. Local. June-August.

First record, *Sib.* 1794.

3. **Swere.** Horton, Wroxton, Shutford, *Gull.* Hanwell, beyond South Newington, not common, *Bees.* Bretch, *A. Fr.* Shutford.

4. **Ray.** Abundant on Otmoor, *A. Fr.* Studley, *Hb. Bx.* Stow Wood, *H. Ridley.* Marston, *R. Linton.* Marsh betn. Lower Heyford and Kirtlington, Headington Wick.

5. **Isis.** South Leigh Heath, *Sib.* Binsey, *H. Bos.* Bruern, North Leigh, Wychwood, Port Meadow, Ramsden Heath.

6. **Thame.** Bullingdon Green, *Sib.* Thame, *Hb. Bx.* Albury, Shot-over, Cowley Marsh.

7. **Thames.** Binfield Heath, Woodcote Common, Ibstone Common, North Stoke.

Berks. Between Kennington and Radley, *H. E. Garnsey.* Near Sandford Lasher, Bagley Wood, Frilford Heath, Wootton, Boar's Hill.

The Bagley Wood plant is a large-flowered, broad-leaved form, but the chain of connecting links with typical *Flammula* is too unbroken to warrant varietal distinction. The commons on the Tertiary deposits of the Chilterns yield the form *pseudo reptans*, Syme, a very variable plant, having oftentimes in the autumn broad leaves and small flowers. This has been sent to me as *ophioglossifolius*, from which it differs abundantly. I suspect *Flammula* may be absent from the Stour district.

R. arvensis, L. *Corn Buttercup.*

Top. Bot. 15. Syme, E. B. i. 46. 38 Nym. 13.

Colonist. A. Cornfields. Locally common. June-Aug.

First record, *Sib.* 1794. Unlocalised.

1. **Stour.** Sibford, Tadmarton.

2. **Ouse.** Cottisford, Stoke Lyne.

3. **Swere.** Neithrop, *Gull.* Banbury, Hanwell, *A. Fr.*

4. **Ray.** Woodstock, *H. Bos.* Elsfield, Headington Wick, Stow Wood, Bicester.

5. **Isis.** Witney, *H. Bos.* Handborough, Ditchley, Charlbury, Ascott.

6. **Thame.** Oxford, *Lawson.* Thame, *Hb. Bx.* Dorchester, *F. Bennett.*

7. **Thames.** Goring; most abundant in fields on the Lower Chalk from Chinnor westwards.

Berks. Tubney, Boar's Hill, Basildon, Blewberry, Wittenham, etc.

R. sardous, Cr. *R. philonotis, Ehrh.*

R. hirsutus, Curt. Top. Bot. 14. Syme, E. B. i. 43. 36. Nym. 14.

Native. Inundatal. Moist pastures, commons; rare or extinct. June.

First record, *Sib.* 1794.

3. **Swere.** Banbury, *A. Beesley*, in *Bees. Hist.* No specific locality [was it rightly identified?] Top. Bot. *Beesley Cat.*

5. **Isis.** South Leigh Heath, *Sib.* now enclosed.

6. **Thame.** Bullingdon Marsh, *E. Fox.* Extinct(?).

Berks. Near Wellington College, *Penny.* Kintbury, Elcot, *Reeks.*
Northants (probably extinct), Warwick casual.

R. sceleratus, L. *Celery-leaved Buttercup.* Marsh Crowfoot.

Top. Bot. 14. Syme, E. B. i. 31. 27. Nym. 14.

Native. Paludal. Pools, shallow water, muddy ditches, etc. Local.
A. June-Sept.

First record, *Sib.* 1794. Unlocalised.

3. **Swere.** Nr. Dye House, Wroxton *Gull.* Watery places (?), not common, *Beesl.* Hanwell, *F. Fr.* Broughton Plantation; not common about Banbury, *A. Fr.* Clattercut.

4. **Ray.** Lower Heyford, *E. Fox,* Bicester, Elsfield, Headington Wick, *H. Bos.* Oddington, Lower Heyford, Marston Meadows, Horton and Studley, Noke, Kirtlington.

5. **Isis.** Wolvercote, *H. Bos.* Walton's Well, *R. Linton.* Binsey, Botley. Plentiful in lane betn. Foscott and Bruern.

6. **Thame.** Oxford with small flowers and fruit, *Hb. Lawson.* Thame, *Hb. Bx.* Near Forest Hill, *H. E. Garnsey.* Dorchester, *F. Bennett.* Radley, abundant.

Berks. Ferry Hinksey, *H. Ridley.* Twyford, *H. Boswell.* Marcham, South Hinksey.

R. parviflorus, L.

Top. Bot. 14. Syme, E. B. i. 45. 27. Nym. 14.

Native. Glareal. Dry banks. A. Local, and decreasing. May-June.

First record, *Sib.* 1794.

4. **Ray.** Many places about Oxford, as at Elsfield, *Bx. MSS.* Elsfield rare, *H. Bos.* Stow Wood, *Prof. Daubeny,* 1842. Headington, *R. Linton.*

5. **Isis.** South Leigh, *Sib.* extinct. Botley, *Bx. MSS.* Wychwood. Abundant in central riding from Cornbury to Leafield.

6. **Thame.** Shotover, Bullingdon Green, *Sib.*

7. **Thames.** Near Bledlow.

Berks. Abingdon Road, nr. Oxford, *Walk.* Happy Valley, *R. Linton.* Cumnor Hill, *H. Bos.* Bagley Wood, not uncommon.

The decrease of this plant during the last fifty years about Oxford is remarkable. It is thinly scattered through the bordering counties, being very rare in Northants.

R. aquatilis, L. (aggregate). *Water Buttercup.*

Native, ponds, ditches, etc. April-July. Generally distributed.

First record, *Ray's Hist. Plant.* 1686, in fluvio Iside Oxon.

præter fonte copiosum. This probably refers to *R. fluitans*. 'Among the earliest of the aqueous plants—and that which is seldom out of sight until the Thames loses somewhat of its purity—is the Water Crowfoot, the large white flowers of which rise in sparkling profusion above the surface; and . . . the curious variety in the floating and submerged leaves is very apparent—the former being broadly lobed while the latter are cut into minute thread-like divisions somewhat resembling the leaves of Fennel. Further down, where the stream acquires increased depth and velocity, the plant assumes a different character, the flat leaves entirely disappear, both stem and leaves being drawn out by the current into mere bundles of cords of great length; in this case the flowers are only produced at occasional intervals.' *Hall's Book of the Thames*, p. 16.

***R. fluitans*, Lamk. *Water Buttercup*.**

Batrachium fluitans, W. *R. fluviatilis*, Web. Top. Bot. 9. Syme, E. B. i. 17. 16. Nym. 15. Native. Rivers. Frequent. June–Aug.
First record, *Sib.* 1794. *R. fluviatilis*, Wigg. This probably included *R. penicillatus*, Dum.

3. Swere. Canal near King Sutton. *R. French*.

4. Ray. Cherwell! *Sib.*

5. Isis. Isis and Windrush! *Sib.* Folly Bridge to Kelmscott.

6. Thame. Oxford, *Hb. Br. Mus. M. Lawson*. Nuneham, *H. Bos.* Sandford.

7. Thames. Goring, Maple Durham, Henley, Sonning. A characteristic feature of the Thames from Bablock Hithe to Sonning.

It varies as to the size of its flowers, but the large flowered form is more frequent; the smaller plant may be *R. Bachii*, W.

Berks, Bucks, Northants, Gloster, and Warwick.

***R. circinatus*, Sib.**

Batrachium circinatum, Nym. Top. Bot. 8. Syme, E. B. i. 16. 15. Nym. 15.

Native. Ponds, canals, and streams, rather common. June–Aug.

First record, *Sib.* 1794, and first as British.

3. Swere. Banbury, often with *aquatilis*, *Gull*. Hardwick Rd. *R. French*. Crouch fields, *Miss Rusher*. Adderbury, *Hb. A. Fr.* Clattercut.

4. Ray. Bayswater, Islip, *Bos*. Upper Heyford, Oxford, Bicester.

5. Isis. South Leigh, *Sib.* Binsey, *Bos*. Isis, *Hb. Br. Mus. Dyer*. Railway Pond near Red House, *H. E. Garnsey*. Wolvercote, Witney, Handborough, Charlbury, Oxford Canal, abundant nr. Yarnton.

6. Thame. Christ Church Meadows, *Sib.* Ifley, *Hb. Lawson*. Thame, *Hb. Bx.* Dorchester, Chiselhampton.

7. Thames. Goring, *Newbould*. Henley.

Berks. Sonning, *Hb. Br. Mus. Rudge*. Abingdon Canal, abundant; Hinksey, Iffley meadows.

This plant not unfrequently occurs growing with other varieties of *Batrachium*, but retains its characteristic features.

***B. trichophyllum*, Chair.**

Batrachium trichophyllum, F. Sz. Syme, E. B. i. 23. 21. Nym. 15.

Native. Lacustral. Still waters. Local and rare. May-June.

First record, *Rev. W. W. Newbould*, circa 1860.

2. Ouse. Near Hethe.

4. Ray. Bladon and Begbrook, 1863, *H. Bos.*, near the Crescent, Oxford, Bladon, *Rogers*, 1882. Blackthorn near Bicester, nr. Charlton.

6. Thame. Cowley Marsh, 1861, *H. Bos.* Sandford.

7. Thames. Pangbourne, *Newb.*

Berks. Pangbourne and Streatley, *Newb.* Near Cookham, *Britten*.

Wargrave, *Melville*. Abingdon! See *Rep. of Rec. Club*, 1881, p. 204, and occurs sparingly in the bordering counties. This appears to be a distinct plant. Its affinities are rather with *circinatus* than *Drouetii* from which it is easily recognisable.

***B. Drouetii*, F. Sz.**

Batrachium Drouetii, Nym. Syme, E. B. i. 22. 20. Nym. 15.

Native. Ponds, ditches, and slow streams. May-June.

First record, *W. T. T. Dyer*, 1871. *Journ. Bot. vol. ix.*

3. Swere. Deddington.

4. Ray. Pond between Woodstock Park and Station, Water Eaton pond. See *Rep. of Rec. Club*, 1881. Rousham, typical, Middleton Stoney.

5. Isis. Burford, Handborough, Port Meadow, Bampton, Witney, *W. Mathews*, 1883.

6. Thame. Shotover.

Berks. Marcham, Bablock Hithe, *Dyer*. Bucks, Northants, Gloucesh., Warwick.

This is the common pond *Batrachium* in the Cherwell Valley. A form of *peltatus* without floating leaves is occasionally mistaken for it. The flowers vary somewhat in size but are always smaller than *peltatus* forms; its much lighter green foliage, hispid receptacle and flaccid habit distinguish it from *trichophyllum*.

***B. radians*, Rev.**

Batrachium diversifolium, Sch. Nym. 15.

Native. Ponds. Rare. June.

First record, *the Author*, 1883, near Bicester.

This appears to be *trichophyllus* with floating leaves. In Warwick only.

***R. peltatus*, Fries.**

Batrachium peltatum, Pr. Fl. [Nym. 15]. *R. truncatus*, Dumort.

R. floribundus, Bab.

Native. Ponds, ditches. Local. April–July.

First record, *Sir Jos. Banks*, 1760, *circa*.

2. Ouse. Ardley, Hethe.

3. Swere. Broughton.

4. Ray. Marston Lane, *heterophyllus*, Sib. Rousham.

5. Isis. Near Oxford, *Jos. Banks*, *Hb. Br. Mus.* South Leigh, Sib. *heterophyllus*. Abundant in the Upper Thames as *floribundus*.

6. Thame. Albury.

7. Thames. Crowell Hill, *Hb. Br.* Nettlebed, *floribundus*, *A. Fr.* Woodcote, *truncatus*. Nuffield, Binfield, Chinnor, Stokenchurch, Ibstone, Lane End, *floribundus*.

Berks. Wokingham, *Watson*. Ilsley, *truncatus*. Sonning, *Hb. Br. Mus. Rudge*, *floribundus*.

Bucks, Northants, Warwick, Gloucester.

This is the characteristic *Ranunculus* of the Chilterns, the large white flowers being abundantly produced in almost every part. The separation of *floribundus* and *truncatus* has not been attempted—the characters appearing inconstant. Some *peltatus* forms approximate to *heterophyllus*, Fries. in leaf cutting; a starved form with small flowers, wanting the parenchymatous leaves, occurs on the muddy margins of ponds, and probably is *R. caespitosus*, Th. Another form, occurring in the Thames, with long peduncles, may be the *R. elongatus*, Hiern; and another form occurs without floating leaves, not the *submersus* of Bab., which is a form of *heterophyllus*.

***Ranunculus penicillatus*, Dum.**

Batrachium penicillatum, Dum. *R. pseudo-fluitans*, Bab. Syme, E. B. i. 20.

Native. Canals, ditches, and rivers. May–July.

First record, *W. T. T. Dyer*, 1871. *Journ. Bot. ix.*

2. Ouse. Mixbury.

4. Ray. About Oxford, *Dyer*. Marston, Islip, Heyford.

5. Isis. Wytham, *R. Thurland*. Handborough, Eynsham.

6. Thame. Iffley, Sandford.

7. Thames. Caversham, *J. French*. In the flowing spring. Sonning, in an unusually fine state; no floating leaves. *Rep. of Rec. Club*, 1883.

Berks. Kennington, Abingdon Canal. Northants, Nene, Warwick, Gloucester, near *Lechlade*.

R. heterophyllum, Bab.

Batrachium heterophyllum, S. F. Gray. Syme, E. B. i. 21. 19. Nym. 16. Native. Rivers. June.

First record, *Babington*, 1849.

6. Thame, near South Stoke. Thames, Pangbourne, *Bab.* in Ann. Nat. Hist. ii. 16. 393. Mr. Newbould informs me this is the true *heterophyllum*. Sibthorp's *heterophyllum* included, if it did not represent, *peltatus*.

[R. Lenormandi, F. Sz. Bagshot Heath, Berks; Gloster, Warwick.]

R. hederaceus, L. Ivy-leaved Crowfoot.

Batrachium hederaceum, S. F. Gray. Syme, E. B. i. 30. 26. Top. Bot. 11. Nym. 16.

Native. Lacustral, shallow streams, borders of ponds, wet places.

Local. May-Aug.

First record, *Sib.* 1794.

3. Swere. Pool near Milton, *A. Fr.* Hanwell Heath, 1851, *T. Bees*.

4. Ray. Marston, *Bx. in Walk. Fl.*

5. Isis. South Leigh, *Sib.* Wolvercote, *H. Bos.* Pond on Wolvercote Green, *H. E. Garnsey*. Stanton Harcourt, Eynsham, *Sib.* Wychwood, Handborough.

6. Thame. Littlemore, *Walker*. S. side of Shotover, *Bx. MSS.* Between Bullingdon and Horsepath, Cowley Marsh, 1833, *Bx. Thame, Bx. Hb.* Albury.

7. Thames. Caversham, Chambers's Green.

Berks. S. Hinksey, *H. Bos.* Tuns Lane, Erleigh, *F. Tufnail*.

The Albury plant was probably, *R. homiohyllum*, Ten.—a floating form.

HELLEBORUS. L.**H. foetidus, L. Stinking Hellebore, Tetter Wort.**

[Top. Bot. 23.] Syme, E. B. i. 59. 45. Baxt. 103. Nym. 17.

Denizen. Sylvestral. Wooded quarries. Local and rare. Feb.-Apr.

First record, *Sib.* 1794.

4. Ray. Kingswood Lane, Lower Heyford, *Woodward, Bx. Br. P.*

5. Isis. Cornbury Stone Quarries, *Sib. Woodward*, 1884! See *Rep. of Rec. Club*, 1881. Blenheim, *Rogers*.

Berks. Windsor, *Phyt. v.* 528 *n.s.* Buckland, *Bos.* Bracketed in Top. Bot. for Berks, Bucks, Northants (it is a denizen in Yardley Chase), and Warwick.

H. viridis, L. Bear's foot.

[See Top. Bot. 23.] Syme, E. B. i. 57. 44. Nym. 17. Native. Sylvestral. P. Woods on Chalk. Denizen elsewhere. Local. Mar.-May. First record, *J. Bobart*, 1699, in Hist. Ox. iii. *Helleborus niger*

syvestris ramosus latiore folio deciduo. In sylvis pago vulgo Stokenchurch dicto vicinis agro Oxoniensis . . . sponte et copiose nascitur.

2. Ouse. Ardley Wood.
3. Swere. Hanwell, *Gull*. Can hardly be considered wild, as the place appears to have originally been a garden, and still contains *Eranthis*, etc., *Bees*.
4. Ray. Kingswood Lane, Lower Heyford, *G. Woodward in Bx*. Copse near Water Eaton, *Hb. Lawson!* See *Rep. of Rec. Club*, 1881.
5. Isis. Woodstock, *Bree in Purton's Mid. Fl.* Wychwood, *R. Linton!* Wilcote, plentiful.
6. Thame. Wood Perry Farm, *Sib*.
7. Thames. Stokenchurch, *Bobart*. Nuffield, *Sib!* Mongewell! *J. Oglander in Walk*. Nuffield, in a wood going from Heath End Farm to Wallingford, in the greatest plenty, *probably in Mr. Sheffield's writing in Dill. Ray in Bib. Hort. Ox.* Buckwood, Mongewell, Bolton King! See *Rep. of Rec. Club*, 1881.

Berks. Tidmarsh, near Pangbourne, near Newbury, *Mr. Sheffield in Dill. Ray*. Hampstead Norris, *Compton's Hist.* Bucks, native. Northants (denizen or alien), Gloucester, Warwick (alien).

This plant is bracketed in Top. Bot., Mr. Watson having probably Mr. Beesley's statement about the North Oxfordshire station in his mind; but its wide range in old woods on the Chalk downs affords sufficient evidence of its nativity—if that grade be given to it in Bucks or Kent.

* *Eranthis hyemalis*, *Sal.* *Winter Aconite*.

Comp. Cyb. 477. Syme, E. B. i. 55. 43. Nym. 18. Alien. Plantations, parks, etc. Jan.—March.

2. Ouse. Ardley. Escape.
 3. Swere. Hanwell Plantation. *Bees*. Hedgebank near Perry's Nursery, Banbury; bank of a rivulet at Milton, *A. Fr.* Steeple Aston, *Rev. E. Fox*.
 5. Isis. Blenheim, *Rogers*. Roadside near Charlbury.
- Berks.** Parklike Meadows, Burghfield, *F. Tufnail*.

CALTHA. L.

C. palustris, L. *Marsh Marigold*.

Top. Bot. 15. Syme, E. B. i. 50. 40. Baxt. 153. Nym. 18.

Native. Paludal. River sides, wet meadows, etc. Common, and generally distributed. P. Mar.—June.

First record, *Sib*. 1794. Unlocalised.

Obs. A large tract of valuable meadow land in Oxon and Northants, on the banks of the Cherwell, has been much injured by a navigable canal made considerably above its level, and from Banbury to Oxford very ill-

executed. It is rendered extremely boggy by the continual oozing of the water through its banks, and in lieu of meadow grasses of the best quality, with which it abounded, it is now over-run by *Caltha palustris* and other aquatic plants. *Agric. Rep. of Oxford*, p. 207.

A double-flowered form has been found at Kirtlington, where the plant is unusually fine, by the Cherwell, under Gibraltar rocks, and also at Marcham, Berks. The plant varies extremely in leaf cutting, from roundly crenate to acutely serrate. A plant with a creeping rootstock was noticed in Ditchley Woods, and Baxter says he has found 'a small variety with more reclining stems, each bearing only one to three flowers, with petals only about half-size of the common one, in boggy places at Stow Wood.'

Caltha forms one of the great adornments of our meadows in early spring.

Var. *C. Guerangerii*, Boreau.

Top. Bot. 15. Oxford.

5. *Isis*. Christ Church Meadow, *Hb. Br. Mus. W. T. Dyer*. Charlbury, Ifley Meadows, Weston peat pits, Wychwood Forest.

AQUILEGIA. L.

A. vulgaris, L. *Columbine*.

Top. Bot. 17. Syme, E. B. i. 60. 46. Nym. 18. Baxt. 221, from a plant gathered on Shotover 1836.

Native. Sylvestral. P. Woods, thickets. Local. May-July.

First record, *Aquilegia sylvestris*, C. B. P. Blackstone, 1737.

2. Ouse. Ardley Wood, Stoke Lyne.

3. Swere. Bloxham, an escape, *A. Fr*.

4. Ray. Stow Wood! Wick Copse! *Sib*. In Headington Wick bog, *Bx. MSS.* Tackley, *Rev. E. Fox*.

5. *Isis*. In a coppice near the ranger's lodge in Wychwood Forest, Blackstone. Near Chipping Norton, *Bees*. Glympton, *Bx*. Wychwood, *Hb. Lawson*. Sarsgrove, *Mr. Atkins*. Ditchley, Finstock, Lees rest wood with pink flowers.

6. Thame. Shotover Hill, *Bx. Br. Pl.* Ditto, *Phyt.* iv. 1851, p. 129. *Mr. Bree thinks it native*. Thame, an escape, *A. Fr*.

7. Thames. Shierburne, *Bx. Br. Pl.* Penley Hangings, *Hb. Bx*. Withy Coppice, Penley Wood abundant, wood near lane end.

Berks. Pusey Wood, *H. Bos*. Bessilsleigh, *Bx*. Ilaley Warren, Hampstead Norris, *Comp. Hist.* Streatley, West Woodhay, *Bx*. Bisham Wood, *Flower*. Wytham Wood, Bagley Wood, Unwell Wood.

Obs.—Generally with blue, occasionally with pink, very rarely with white flowers.

**** Aconitum Napellus, L. *Aconite*.**

Syme, E. B. i. 65. 48. Casual. Near Deddington Paper Mill. Not seen by Gulliver though included in his list. Garden escape at Headington.

**** Delphinium Consolida, Br. Fl. *Larkspur*.**

D. Ajacis, Reich. non Linn. Comp. Cyb. Br. 87. Syme, E. B. i. 62. 47. small plant. Nym. 21.

Casual. Cornfields and waste places. Local and rare. July, August. First record, *Gulliver*, 1820.

3. Swere. Near Deddington Paper Mill, *Gull*. Not seen elsewhere. Perhaps both *Delphinium* and *Aconitum* have escaped from a garden. Banbury, *Bx. in Walk*.

4. Ray. Near the Crescent, *H. Bos*. Near the Parks, *Bx. in Walk*. Plentiful in an allotment field growing amongst onions 1885, *D. Ajacis*.

5. Isis. Canal bank near Wolvercote, *T. Thurland*. Nr. Handborough, escape.

6. Thames. Field on Shotover, brought with manure (?), *H. Bos*. Shot-over fields near the wind-mill, *T. Thurland*. One plant near Iffley, *Newbould*.

Berks. Wargrave, *Melville*. Waste ground nr. Cookham Lock, 1865, *Britten*. Fields back of Streatley, woods Basildon, *F. Tufnail*.

The above records show what slight claim this plant has to be included in the Oxon Flora. It was given as an unquestioned native in Walker's Flora, on the two authorities quoted above.

**** Pœonia officinalis, L. *The Peony*.**

Syme, E. B. i. 68. 50. Casual.

5. Isis. Rail side near Bruern signal-box. Garden outcast.

Berks. In a close at Sunningwell, *How's Phytologia*, 1650.

ORD. II. BERBERIDEÆ.

BERBERIS. L.

B. vulgaris, L. *Barberry*.

Top. Bot. 18. Syme, E. B. i. 64. 51 Baxt. 115. Nym. 22.

Denizen. Hedges. Local. Shrub. May, June.

First record, *Plot*, 1677.

2. Ouse. Tusmore and Cottisford, *R. C. Pryor*. Ardley.

3. Swere. Wickham Lane, *Gull*. Ditto, rare, *Bees*. Bodicote, *A. Fr*. Nr. Banbury, *R. French*. Bloxham Grove and Gt. Bourton, O. *V. Aplin*. Gt. Tew, *A. Fr*.

4. **Ray.** Betn. Middleton Stoney and Ardley, *Bx.* Oldbury, and betn. Stonehouse Farm and Weston peat pits, *Wilson Saunders.* Kirtlington, *E. Fox.* Marston, *H. Ridley.* Caversfield, Bicester, nr. Middleton, *H. Bos.* Gt. Chesterton and Bucknell, *G. Woodward* in *Bx.* Marston Lane. Very large bushes about the walls of Water Eaton Manor House, Kirtlington, near Rousham.
5. **Isis.** Betn. Upper and Lower Kiddington, *Plot.* Godstow Nunnery! *Walk.* Hedges about Charlbury frequently, *Blackstone.* Fallow fields about Walcot, *Blackst. MSS.* Wychwood, *Hb. Lawson.* Blenheim, Cornbury quarries, Clanfield.
- Berks.** Bagley, Cumnor, *Bx.* Hinksey, *H. Bos.* Pusey Wood, Buckland, *Bos.* Medley, *Sib.*

ORD. III. NYMPHÆACÆ, DC.

NYMPHÆA. L.

N. alba, L. *White water-lily.*

Top. Bot. 19. Syme, E. B. i. 76. 53. Nym. 23. Baxt. 181-182, from Oxford Spec.

Native. Lacustral. Rivers, ponds. Common. P. June-August. First record, 1794, *Sib.* Unlocalised.

3. **Swere.** Cherwell near King Sutton, *Bees.* Twyford, *A. Fr.*

4. **Ray.** Very common in Cherwell about Heyford and Oxford, *Bx.* Headington Wick, *H. Bos.* Kirtlington, The Parks, river Ray near Islip, etc. *Vur. N. minor,* Syme. In canal at Kidlington.

5. **Isis.** Ditches about Oxford, *Purton. Mid. Fl. Rufford.* Isis, *Hb. Lawson.* Blenheim, *Rogers.* Abundant from Eynsham to Chimney.

6. **Thame.** Sandford, Clifton Hampden, Culham, Dorchester.

7. **Thames.** Moulsoford, Maple Durham, Henley, etc.

Berks. As above. A small flowered form in the ditch at the west side of the field near South Hinksey, nr. the 'Devil's Back Bone,' in flower July 31, 1844. The flowers, when pressed flat in a fully expanded state, measure only $3\frac{1}{4}$ inches across, *Bx. MSS.* Specimens in *Hb. Ox.*

'In the still recesses of the river (about Oxford) we found that queen of water-nymphs, the white water-lily, in the greatest luxuriance, both in number and in the extraordinary size of the flowers and leaves... We found the stems were 8 to 10 feet in length, and the leaves were of immense breadth: the flowers were also unusually developed, and some specimens were suffused with a blush of roseate tint, that contrasted delightfully with the rich green of the calyx and leaves.' *Hall's Book of the Thames*, 85.

Mr. W. Turner of Oxford made his two beautiful paintings of water-lilies from the Cherwell.

Keeley Halswelle's pictures of Thames scenery are very frequently brightened by masses of white lilies. Their showy flowers are a special feature in the Thames Flora.

Bucks, Berks, Northants, Gloucester, Warwick (? wild).

NUPHAR. Sm.

N. luteum, Sm. *Yellow Water-Lily.*

Top. Bot. 20. Syme, E. B. i. 76. 54. Nym. 23. Baxt. 281-282. from Oxford spec.

Native. Lacustral. Rivers, ponds, ditches. Common. P. June-August.

First record, *Sib.* 1794, *Nymphaea lutea*, Ait. Unlocalised.

Frequently painted in pictures of the Thames scenery, and a prominent feature in the river vegetation. It varies considerably in the size of its flowers.

ORD. IV. PAPAVERACEÆ, DC.

PAPAVER. L.

***P. somniferum, L.** *The Garden Poppy.*

Cyb. Br. i. 106. Comp. 479. Syme, E. B. i. 82. 57. Baxt. 53. Nym. 23.

Alien. Waste places. Rare. A. June-July.

First record, *Sib.* 1794.

3. Swere. Manure heap, canal side, Bodicote, *A. Fr.* Cultivated near Banbury, and thence escaping.

4. Ray. Summertown, *Thurland.* Kirtlington, *var. hortense*, Huss. Kidlington, ditto.

5. Isis. Nr. the Observatory, Godstow Nunnery, *Sib.* Yarnton, *R. Linton.* Waste ground nr. G. Western Station. *hortense.*

6. Thame. Bet. St. Clement's and Cowley Marsh (extinct), *Bx. in Walk.* Waste ground near Wallingford, *var. P. setigerum*, God.

7. Thames. Cornfields at Maple Durham, *W. R. Burt in Bx.* 1833. The glabrous form *P. hortense*, Huss. is the more frequent plant.

Berks. Wargrave, *Melville.* Ilsley, Ashridge, *Compt.* Wytham, rail side near Reading.

Northants, Warwick.

P. Rhoeas, L. *Common Red Poppy.*

Top. Bot. 22. Syme, E. B. i. 87. 58. Nym. 24.

Colonist. Cornfields. Abundant, and generally distributed throughout the county; especially abundant on the Northampton sands, the Portland sands, and upper Greenstone formations. A. May-Aug.

First record, *Sib.* 1794. Unlocalised.

Var. *P. strigosum*, Bng. Reich. Icon. iii. t. 16, 4478. Shotover.

In addition to the above variety with appressed hairs, at least two forms occur, one with *acute* narrow leaf segments of a darker and more glossy green, with long spreading reddish pubescence on the peduncle; the second with a long terminal leaflet, little divided, and very pubescent foliage of a paler green, the hairs on the peduncle being paler and weaker. At Foscott on the Gloucestershire boundary occurred another with *pale* red flowers and capsule rather longer than the type; these peculiarities did not, however, appear to suggest *dubium* parentage. A plant with pure white petals was seen near Elsfield.

P. Lamottæ, Bor.

Syme, E. B. i. 89. 59.

Colonist. Tilled and waste ground, walls, etc. A. May–August.

First certain record, *Newbould*, 1860. *Sibthorp's dubium* was probably this.

1. Stour. Tadmarton, *Hb. R. Fr.*!

2. Ouse. Mixbury.

3. Swere. Tadmarton, roadside.

4. Ray. Headington Wick, *H. Bos.* Marston, Noke.

5. Isis. Wolvercote, *H. Bos.* Godstow, Charlbury.

6. Thame. Cowley, *H. Bos.* Caversham, *Rev. W. Newbould.* Wheatley, Holcote.

7. Thames. Goring, see *Rep. of Rec. Club*, 1880.

Very variable in size; from one inch to three feet.

P. Lecoqii, Lmt.

Colonist. Walls, cultivated fields. Local. A. June–August.

Comp. Cyb. 478. Syme, E. B. i. 90. 60. Nym. 24.

First record, *A. French*, about 1868,

3. Swere. Betn. Milton and Barford, *A. F.*

4. Ray. Kirtlington, Marston, typical.

5. Isis. Bampton.

6. Thame. Near Thame, *A. F.* Leaves rather of *Lamottæ*.

7. Thames. Goring, see *Rep. of Rec. Club*, 1880.

Berks. South Hinksey, see *Rep. of Rec. Club*, 1881. Streatley, Lowbury.

The extreme forms or varieties are not difficult to distinguish, but so many intermediates occur that it is not easy to refer some of them to either of the above forms.

Not on record for Gloster.

P. Argemone, L.

Top. Bot. 21. Syme, E. B. i. 91. 61. Nym. 24.

Colonist or native. Waysides, cornfields, etc. Not uncommon. A. June–Aug.

First record, *Sib.* 1794. Unlocalised.

1. **Stour.** Tadmarton heath, *A. Fr.* Stourwell, *T. Bees.*

3. **Swere.** Old Wall, Banbury, Adderbury. Capsule shorter than usual from being starved, *Hb. A. Fr.* Drayton, *E. Walford.* Tadmarton Road, *E. French.* Broughton Castle Road, *T. Bees.*

4. **Ray.** Headington, nr. Joe Pullen's tree, *Bx.* Headington Wick, *H. Bos.* The Parks, *Sib.* Islip, Stow Wood.

5. **Isis.** South Leigh, Eynsham, *Sib.* Betn. Woodstock Road and Heyfield's Hut, *Bx.* Wolvercote.

6. **Thame.** Sandy fields nr. Warnford Asylum, *Bx. MSS.* Cowley, *Hb. Lawson.* Thame, *Hb. Bx.* Bullingdon, *H. Bos.* Shotover Road, *H. E. Garnsey.* Dorchester.

7. **Thames.** Caversham, *Newbould.* Eye and Dunsden, *A. Fr.* Goring, South Stoke. Abundant near Woodcote.

Berks. Wootton heath, *H. Bos.* Tubney, Frilford, Moulsoford, Streatley. At Goring it occurred with a dwarf form, having petals not $\frac{1}{2}$ inch across.

P. micranthum, *Bor.* (?)

***P. hybridum*, L.**

Top. Bot. 21. Syme, E. B. i. 92. 62. Nym. 24.

Colonist. Cornfields. Local and rare. A. June–September.

First record, *Sibth.* 1794.

4. **Ray.** The Parks, *Sibth.* Extinct.

5. **Isis.** Eynsham, *Sibth.*, do. *R. Walker*, 1830. Bank on right-hand side of meadow going from Oxford to Port Meadow, near Heyfield's Hut, 1833, *Bx. MSS.* St. Giles' fields, near the $\frac{1}{2}$ mile tree, *Bx. in Purton.* Extinct. The last locality erroneously referred to the Eynsham Road in *Walk. Fl.*

6. **Thame.** Field below Shotover, *H. Bos.* 1860.

7. **Thames.** Gathampton, *H. Bos.* South Stoke, in cornfield. Goring, in turnip field. North Stoke.

Berks. Elcot, Woodhay, Kintbury, *Reeks.* Nr. Erleigh, *F. Tufnail.* Blewbury downs.

I cannot see that the colour of the petals is scarlet, as stated in the Student's Flora; to me they appear dark crimson. Reichenbach's figure is also coloured scarlet, but it certainly is not so with the Oxon, Berks, and Northants plants.

Berks, Northants, Gloster.

CHELIDONIUM. L.

***C. majus*, L.** Greater Celandine.

Top. Bot. 23. Syme, E. B. i. 99. 67. Baxt. 51. Nym. 25.

Denizen. Hedge banks and waste places, near villages. P. May–August.

First record, *Sibth.*, 1794. Unlocalised.

2. **Ouse.** Mixbury, Ardley.

3. **Swere.** Waste places leading to the Marches, Banbury, *Gull.* Walls abt. Banbury, *Aplin.* Broughton, *R. French!* Bloxham, *S. A. Rusher.*
 4. **Ray.** Elsfield, Water Eaton, *H. Bos.* Noke, *F. Bennett,* Stanton S. John, Stow Wood.
 5. **Isis.** Godstow, *R. Linton.* Wychwood, Wolvercote, *H. Bos.* Woodstock, *Prof. Daubeny,* 1841. Bladon, *Rogers.* Finstock, Stonesfield, Barford, Minster Lovell, Foscott, Handborough.
 6. **Thame.** Waterstock, *A. Fr.*
 7. **Thames.** Aston Rowant, *Bz. Hb.* Ewelme, *H. Bos.* Goring, Binfield.
- Berks.** Streatley, *H. Bos.* Dry Sandford, Tubney.
- ** Escholtzia Californica,** *Hb. Br. Mus. Col., A. French.* A casual in cornfield, Adderbury, Milton, 1870. Bicester Cemetery, *A. Fr.*
- No claim to be considered even as a naturalised plant.
- ** Meconopsis cambrica,** *Vig.* A garden outcast. St. Clement's, 1880. It is well established in the Botanical Garden.

ORD. V. FUMARIACEÆ, DC.

Corydalis, DC.

- ** C. solida,** *Sw.* Syme, E. B. i. 101. 68. Comp. Cyb. 479. Nym. 26. Alien.
- Milton, Adderbury, *Hb. Br. MSS. Col., A. French.* Marsh Baldon plantation, *Hb. Lawson.* Near Christ Church back gate, an escape, *H. Bos.* Mixbury, *R. C. Pryor.*
- * C. lutea,** *DC.* Syme, E. B. i. 102. 69. Comp. Cyb. 479. Nym. 26. Alien. Old walls in villages. Rare. May-June.
- First record, *Mr. Darwall,* in Walk. Fl., 1833.
- Broughton, *S. Rusher!* Milton, *Hb. A. Fr.* Middleton Stoney, *E. Foz.* Elsfield, Somerton, Caversham, *Mr. Darwall.* Thame, *A. Fr.* Lewknor, *H. Bos.* Whitchurch.
- Scarcely naturalized in Oxon. and only occurring on walls in villages.

G. claviculata, DC. *Climbing Fumitory.*

- Syme, E. B. i. 103. 70. Nym. 26.
- Native. Sylvestral. Woods. Very local. A. June-Aug.
- First found, *H. Boswell,* 1870.
5. **Isis.** Plentiful in Hailey Wood, 1870, 1882, *H. Bos.* Bruern Wood and Fyfield Heath, 1884.
- Berks.** Farmer Bishop's Wood, Ambarrow; also near a brook betn. the railway and Sandhurst Road, *Penny.*
- Bucks, very local. Warwick.

FUMARIA. L.

F. capreolata, L.

Aggregate. Top. Bot. 25.

First record, *Sib.* 1794, behind the Park. Garden ground, Headington, *Walk.* Cowley, Headington quarries, *H. Bos.*

Berks. Some plants apparently of this species near Wargrave, *Brit.*

Not recd. from Northants.

[*F. pallidiflora*, *Jord.* Warwick only.]

F. Boraei, Jord.

Syme, E. B. i. 106. 72. Nym. 27.

Colonist. Cultivated fields. Rare. A. June.

First record, *the Author*, 1880.

5. **Isis.** Charlbury and Stonesfield.

F. confusa, Jord.

Syme, E. B. i. 107. 73.

Colonist. Cultivated fields. Rare. A. July-August.

First record, *the Author*.

6. **Thame.** Near Bullingdon, 1885.

Warwick (Bilton).

F. muralis, Sond.

Syme, E. B. i. 108. 74. Nym. 27.

Colonist. Cultivated ground. Rare. A. June-September.

First record, see *Rep. of Rec. Club*, 1880, *the Author*.

6. **Thame.** Headington, near the quarries.

Sibthorp's plant was probably this.

In *Rep. of Ex. Club*, 1882, this is mentioned, in error, as having been sent from Lowbury, Berks. *F. Vaillantii* was sent, not *muralis*.

Warwick.

F. officinalis, L. *Common Fumitory.*

Top. Bot. 26. Syme, E. B. i. 109. 76. Nym. 27. Baxt. 278.

Cultivated fields. Common and generally distributed. A. May-October.

First record, *Sibth.* 1794. Unlocalised.

A large rampant form was seen near Mixbury, Cottisford, and Littlemore. A compact form with small flowers in the chalky fields about Chinnor. A small, bushy and interlacing plant common in gardens at Cowley in 1885.

The large climbing form may be distinguished from forms of *capreolata* by the abrupt enlargement in the lip of the lower petal.

F. densiflora, DC.

F. micrantha, *Lag.* Syme, E. B. i. 109. 75. Top. Bot. 26. Nym. 28.

Colonist. Agrestal. Cultivated fields. Confined to the Chalk. A.

June-September.

First record, *Newbould and Boswell*, 1860.

7. **Thames.** Goring, *Newb. and Bos.* Nr. Wallingford, *B. King.* Caversham, Watlington, Ipsden, Stokenchurch, Chinnor, Nuffield, see *Rep. of Rec. Club*, 1881.

Berks. Lowbury, field near Unwell Wood, Moultsford, see *Rep. of Rec. Club*, 1881. **Bucks.** nr. Prince's Risboro', *Rep. of Rec. Club*, 1883.

Readily known by its large sepals.

F. Vaillantii, Lois.

Syme, E. B. i. 113. 77. Nym. 28.

Colonist. Cultivated Chalk fields. Rare. A. June–September.

First record, *Druce and King*, 1880, see *Rep. of Record Club*.

7. **Thames.** Nr. Wallingford, *Bolton King.* Goring, in turnip field, nr. Mongewell, nr. Ewelme.

Berks. Fields near Lowbury. Not in other border counties.

F. parviflora, Lam.

Syme, E. B. i. 114. 78. Nym. 28.

Colonist. Agrestal. Cultivated fields on the Lower Chalk. Local. A. June–October.

First record, *Druce and King*, 1880, see *Rec. Club Rep.* for 1881.

7. **Thames.** Fields near Mongewell, Watlington, Chinnor, abundant.

Berks. Streatley, field near Lowbury. **Bucks** (nr. Prince's Risboro'), *Rep. of Rec. Club*, 1883. **Gloster.**

This plant is much more glaucous than any other British *Fumaria*.

ORD. VI. CRUCIFERÆ. *Juss.*

RAPHANISTRUM [T.]. E.

R. innocuum, Med. *Wild Radish.*

Raphanus Raphanistrum, L. Syme, E. B. i. 120. 81. Baxt. 359. Nym. 29.

Colonist. Agrestal. Cornfields. More frequent on sandy soil. A. May–September.

First record, *Sir Jos. Banks*, nr. Oxford, 1760.

Area general. The white-flowered form is the more frequent. The yellow-flowered form has been noticed at Tadmarton, Headington, Shotover, Bix, and Chinnor; and at Tubney in Berks.

** *Raphanus sativus, L.* The garden radish. Casual. On waste ground and as a garden outcast, as at Headington.

* **CHEIRANTHUS. L.**

C. Cheiri, L. *Wall flower, Gilliflower.*

Comp. Cyb. 485. Syme, E. B. i. 154. 106. Baxt. 237. Nym. 31. *Denizen.* Old walls. P. May–June.

First record, *Sib.* 1794.

3. Swere. Upper Tadmarton, *A. Fr.*

4. Bay. Bicester, not wild, *A. Fr.* Mag. Coll. walls, *Sib.* New Coll. Lane, *H. Bos.*

5. Isis. Godstow, *Hb. Br. Mus. Coll. Perrin*, with very small yellow flowers, labelled *E. cheiranthoides*. Wolvercote, St. John's Coll. walls, Worcester Coll., New Road, etc. Yellow flowers.

6. Thame. Wheatley, Tetsworth, variegated flowers. Iffley.

7. Thames. Goring, Maple Durham.

Berks. Reading Abbey, old walls at Streatley.

BARBAREA. Br.

B. stricta, *Andrz.*

Syme, E. B. i. 173. 122. Nym. 31.

Native (?). River sides. Rare. P. May-July.

First record, *A. French*, 1876.

6. Thame. Banks of stream 2 miles above Thame, *A. Fr.*

Northants (casual), Warwick.

* *B. Præcox*, *Br.* *American Cress.*

Comp. Cyb. 484. Syme, E. B. i. 174. 123. Nym. 31.

Alien. Waste ground. Local. B. April-October.

First record, *A. French*, 1870.

3. Swere. Roadside, Gt. Tew, a solitary plant nr. Adderbury, *A. Fr.*

5. Isis. Railway side, Port Meadow.

6. Thame. Waste ground, Iffley.

Berks. (Wargrave), Northants. Warwick.

B. vulgaris, *Br. (Reich.).* *Winter Cress.*

Top. Bot. 43. Syme, E. B. i. 171. 120. Baxt. 450. Nym. 31.

Native. Banks of rivers, ditches, and moist places throughout the country. B. May-July.

First record, *Sibth.* 1794. *Erysimum Barbarea*, *L.*

Mr. Thiselton Dyer recorded a *divaricate* form from the Gulf Stream, Oxford. It also occurs on the river banks about Sandford, and is figured in *Sturm's Deutsch. Fl.* for *arcuata*.

* *B. intermedia*, *Bor.*

Syme, E. B. i. 174. 123. Comp. Cyb. 484. Nym. 32.

Colonist. Cultivated fields. Rare. B. May-June.

First record, *the Author*, 1880.

7. Thames. On Woodcote Common; still there in 1884, *Rep. of Rec.*

Club. Near Kidmoor Farm; probably introduced with clover seeds. Warwick, whence *B. arcuata* is also recorded.

TURRITIS. L.**T. glabra, L.** *Tower Cress.*

Arabis perfoliata, Lamk. Syme, E. B. i. 169. 119. Bx. 430. Top. Bot. 43. Nym. 32.

Native. Woods, hedge-banks. Local and rare. B. May-July.

First record, *Sib.* 1794.

4. Ray. Stow Wood, *Sib.* ! Fields near Stow Wood, *E. Fox* !

5. Isis. On a wall at Witney, *T. Forster*, in *Bot. Guide*.

7. Thames. Henley Park Hill, *Prof. Daubeny*, 1840.

Berks. Nr. Maidenhead, Bx. 1841. Cookham Down, *Phyt.* i. o. s. Bucks, Gloster, Warwick.

ARABIS. L.*** A. Turrita, L.** *Tower Wall Cress.*

Comp. Cyb. 483. Syme, E. B. i. 169. 118. Baxt. 159, from an Oxford plant. Nym. 32.

Alien. Old walls. Now extinct. May.

First record, *Sib.* 1794, Mag. Coll. Walls.

Mag. Coll. *Rev. Mr. White*, April, 1832, in *Walk. Fl.* It formerly grew within the old triangle, *R. Walker*. Naturalized on the walls of the Bot. Gardens near the old house, Bx. Now extirpated. It was destroyed in repairing Mag. Coll. walls, *Journ. Bot.* ix. 146. I have specimens from walls at Oxford gathered by Sir W. C. Trevelyan, *Cyb. Br.* i. 143. Mag. Coll. walls, 1855, *H. Bos.*

The plant never deserved a place in our Flora except as a somewhat naturalized alien.

A. hirsuta, L. *Hairy Rock Cress.*

A. sagittata, DC. Top. Bot. 42. Syme, E. B. i. 168. 116. Nym. 32.

Native. Rupestral. Walls, dry fields, etc. B. June-August.

First record, *Blackstone*, 1736. *Barbarea muralis*, J. B.

4. Ray. Stow Wood, *H. Bos.* ! Barton, *H. Ridley*.

5. Isis. Ascot, field under the forest wall, near the Stile, *Black MSS.* Charlbury, *R. Linton*. Wootton, roadside, *A. F.* Rewley Abbey, *Sib. Turritis hirsuta*.

6. Thame. Shotover ! Bx. 1831. Holton Park wall, *R. Walk.* ! Thame, *A. Fr.* Wheatley.

7. Thames. Goring, *W. Pamplin* ! Stokenchurch, *Hb. Bx.*

Berks. Sonning, railway cutting, *P. Tufnail*. Hoe Benham, *Reeks*.

* *A. albida*, Stev.

Alien. Garden escape. Bicester, *A. Fr.* Naturalized at Tetsworth with *C. Cheiri*. Garden escape at Charlbury and Broughton.

NASTURTIUM. Br.

N. officinale, Br. *Water Cress.*

Top. Bot. 43. Syme, E. B. i. 176. 125. Nym. 35. Baxt. 271.

Native. Paludal. Brooks, wet places. Common and generally distributed. P. May–October.

First record, 'Nast. aquat. foliis minoribus precocius. D. Dale in Newell's bogs and other places' (about Wychwood) *Blackstone*, 1737.

Var. N. stifolium, Reich. Icon. ii. t. 50.

3. **Swere.** Ditch near Deddington, *A. Fr.* Rail-side, Somerton.

5. **Isis.** North Leigh.

6. **Thame.** Bullingdon, perhaps this, *Newb.*

Var. N. microphyllum, Reich. Shotover, Wychwood, Marston, Headington Wick, Ibstone, etc., is only a starved state. It is often found on the mud recently thrown out of ditches.

A luxuriant form with the terminal leaflet broad and large is probably the *var. N. latifolium* of Bouvier's *Flore des Alpes de la Suisse*.

The water-cress is cultivated in shallow pools near Bledlow, and considerable quantities sent to the London market.

Nasturtium amphibium, Br. Gt. Yellow Radish.

Top. Bot. 45. Syme, E. B. i. 181. 128. Nym. 35.

Native. Paludal. Banks of rivers, ditches, watery places. Local. P. June–September.

First record, *Sib.* 1794, *Sisymbrium amphibium*. Unlocalised.

3. **Swere.** Canal-side, Banbury, *Bees.* Neithrop Canal, *R. French.*

4. **Ray.** Otmoor, *A. Fr.* Canal nr. Thrupp, *H. Bos.* Mag. Coll. meadow, *H. E. Garnsey.* Heyfords, Kirtlington.

5. **Isis.** Port Meadow, Eynsham, Binsey, Newbridge, etc.

6. **Thame.** Sandford, *Hb. Lawson.* Kennington Island, Iffley, Dorchester, Clifton Hampden, Littlemore.

7. **Thames.** Caversham Common, *F. A. Lees.* Maple Durham, North Stoke, Goring.

Berks. Iffley meadows, Radley, Pangbourne, Sonning, etc.

Var. N. aquaticum, Sib. Nearly entire leaves, occurs with the ordinary form.

Nasturtium sylvestre. Br.

Top. Bot. 44. Syme, E. B. i. 179. 126. Nym. 35.

Native. Paludal. Wet meadows. Local. A. June–October.

First record, *Sib.* 1794, *Sisymbrium sylvestre, L.*

3. **Swere.** Third march, canal side. Rare, *Gull.*

4. **Ray.** Otmoor, *Sib.* Charlton, Horton, Marston, etc.

5. **Isis.** Canal bank beyond High Bridge, Binsey, Port Meadow \ *Sib.* Near *Medley Lock, Bz. MSS.* Wolvercote, *H. Bos.* Osney.

6. Thame. Nr. Waterstock, *A. Fr.* Ch. Ch. and Merton Meadows, *Bz. MSS.*

7. Thames. Shiplake, *F. A. Lees.*

Berks. S. Hinksey, *Bos.* Radley.

Berks, Bucks, Northants rare, Gloster, Warwick, error.

Much commoner near Oxford than *palustre*.

***Nasturtium palustre*, D C.** *Yellow Cress.*

N. terrestre, Sm. Top. Bot. 44. Syme, E. B. i. 180. 127. Nym. 36.

Native. Paludal. Banks of ditches, wet places. *A.* June–October.

First record, *Sib.* 1794, *Sisymbrium terrestre*, Curt.

3. Swere. Banbury side of mill dam, *Gull.* Canal side, Banbury, *E. Walford.* Pond, Broughton Park, *A. Fr.* Abundant round Clattercut reservoir.

4. Ray. Cross road betn. Middleton Stoney and Bicester, *A. Fr.* Bicester, *Bos.* Otmoor, *Bz. in Walk.!*

5. Isis. Near the Diamond House, *Sib.* Nr. Medley Lock. *Bz. in Walk.* Port Meadow! *H. E. Garnsey.* Osney, Goring, Maple Durham.

6. Thame. Muddy Brook, Thame, *A. Fr.* Merton Meadow, *Walk.*

Berks. Radley, Pangbourne, Wallingford.

The much smaller flowers and short turgid pod readily distinguish it from the preceding plant.

CARDAMINE. L.

***C. pratensis*, L.** *Cuckoo Flower. Lady's Smock.*

Top. Bot. 39. Syme, E. B. i. 150. 109. Baxt. 141. Nym. 36.

Native. Pratal. Meadows. Common. *P.* April–June.

First record, *Sibth.* 1749. Unlocalised. Generally distributed. Abundant in Thames Meadows.

With double flowers near Banbury, *Aplin.* Weston, *Holliday*, and Handborough.

Berks. Nr. Sunningwell, *H. Bos.*

In wet meadows it rarely ripens fruit being propagated by the leaflets.

It occurred with fruit on Shotover, also a form having narrow petals widely separated. A form with large overlapping petals was found at Heyford.

Var. *dentata*, Schultz.

4. Ray. Weston peat pits.

***C. hirsuta*, L.** *Hairy Bitter Cress.*

Top. Bot. 39. Syme, E. B. i. 160. 110. Nym. 37.

Native. Ditch banks, walls, sandy ground, *A.* March–August.

First record, *Blackstone*, 1746. By rills in Wychwood Forest common.

This probably included C. sylvatica.

1. **Stour.** Tadmarton Camp.
2. **Ouse.** Mixbury.
3. **Swere.** Williamscoot, *Gull.* Nr. Grimsbury (possibly Northamptonshire), *Bees.* Milton, *A. Fr.* Broughton, Somerton.
4. **Ray.** Elsfield, Summertown, *H. Bos.* Lower Heyford.
5. **Isis.** Wychwood, *Blackstone.* Charlbury, Stonesfield, Woodstock, Shipton nr. Wychwood, Handborough abundant both by railway and on walls in village.
6. **Thame.** Iffley. Headington quarry, a weed, *Bx.* Sandford.
7. **Thames.** Whitchurch, *Newb.*

Berks. Marcham, S. Hinksey.

This plant has a great liking for railway ballast; the stamens vary from 4 to 6 in number.

C. sylvatica, Link.

Top. Bot. 40. Syme, E. B. i. 161. 112. Nym. 37. *C. flexuosa*, With. Native. Damp shady places, brook-sides, etc. A. March–August. First record, *Dillenius*, about 1730, under the Botanic Garden wall.

1. **Stour.** Tadmarton heath! *Bees.*
2. **Ouse.** Hethe.
3. **Swere.** Bulls' pond, Drayton, *H. E. Walford.*
4. **Ray.** Noke, Bot. Gard., *Dill.* Fine specimens near Rousham and Upper Heyford. Headington Wick, very fine.
5. **Isis.** Wychwood.
6. **Thame.** Dorchester.

Berks. Sonning, railway cutting, *F. Tufnail.*

Bucks, Northants, Gloster, Warwick.

The plants at Rousham, growing on mud dredged from the river, were very luxuriant, somewhat resembling *C. amara*, but the petals were not spreading as in that species.

C. amara, L. Bitter Cress.

Syme, E. B. i. 158. 108. Top. Bot. 39. Nym. 37. Native. Paludal. River and canal banks. Local. P. March–June. First record, *Sib.* 1794.

3. **Swere.** Grimsbury Mill meadow, Cherwell side, South of Banbury, *Bees.* Cherwell, Little Bourton, *Aplin.* Somerton, petals tinged with purple.
4. **Ray.** Gosford bridge, *Sib.* Oxford canal, in meadow at S.W. of Kirtlington parish, *Mr. Wilson Saunder's list!* Near Summertown, near Islip, near Thrupp, *H. Bos.!* The Parks. *H. E. Garnsey!* 1885. Betn. St. Clement's and Marston, Banks of the Cherwell, *Mr. T. Weaver in Walk.* Everywhere on the Cherwell, E. Fox. Abundant by the canal side from Kirtlington to Upper Heyford.

5. *Isis*. Canal side betn. Oxford and Wolvercote, *Rev. Dr. Whately, Archbishop of Dublin*, in *Walk*. Towing-path side betn. High bridge and Heyfield's hut, *Bx. in Walk*.
6. *Thame*. Near Iffley, *Dr. Goodenough, Bishop of Carlisle*. Sandford.
7. *Thames*. Thames bank, 8 miles from Reading, *Sib*.
- Berks*. Petty's Wood, Pangbourne, Burfield meadows, *F. Tufnail*. Blewbury, *Newb*. Iffley meadows.

Between Upper and Lower Heyford, growing with *C. amara* and *C. pratensis* this year occurred a hybrid, *Cardamine amara pratensis*.

The foliage was identical with *amara*, the flowers darker in colour than *pratensis*, having more of a purplish tint, but slightly smaller than *amara*: the anthers were violet as in *amara*, but the style was nearer that of *pratensis*. There appears to be no reference to this hybrid in the European Floras.

C. amara has occasionally the outer side of petals tinged with pink.

? *C. impatiens*, *L*.

Syme, E. B. i. 161. 112. Nym. 37. Phyt. v. 154.

Native (?). Ambiguity. Old walls, etc., rare; ? if ever found in a wild state.

3. *Swere*. Old wall at Broughton, *H. R. B.* never confirmed.

4. *Ray*. A weed in Botanic Garden, *Bx. MSS.* 1813-1831. Gloster west, Warwick.

[*Dentaria bulbifera*, *L*. *Coral wort*.

Occurs in dry chalk woods about Loudwater, Bucks; it may yet be found in similar situations in the Oxford Chilterns.]

* *Hesperis, matronalis*, *L*. *Dame's Violet*.

Comp. Cyb. 485. Syme, E. B. i. 150. 103. Nym. 39. Baxt. 425.

Casual. Waste places. Scarcely naturalized. May-July.

First record, *Gulliver* about 1820.

2. *Ouse*. Fringford, *Mr. Roundell Palmer*.

3. *Swere*. Nr. Adderbury, *Gull*. Very large in a cornfield near Souldern, *Rev. E. Fox*.

4. *Ray*. Island in the Cherwell, *Hb. Brit. Mus. W. T. Dyer*. Oddington.

5. *Thame*. Plentiful in woods about the cottages, Nuneham, *Mr. W. Morris*, in *Bx. Pl*.

ALLIARIA. *Scp*.

A. officinalis, *And*. *Hedge Garlic, Jack by the Hedge*.

Sisymbrium Alliaria, *Scop*. Syme, E. B. i. 146. 100. Top. Bot. 47. Nym. 40.

Native. Septal. Hedges, road sides, common. B. April-June.

First record, *Sibth*. 1794, *Erysimum Alliaria*, *L*.

Generally distributed.

HEYSINIUM. L.

H. cheiranthoides, L. *Treacle Mustard, Worm seed Mustard.*

Top. Bot. 47. Syme, E. B. i. 149. 102. Nym. 42. Baxt. 62.

Colonist. Moist places, cornfields. A. June–Sept.

First record, *Sibth.* 1794.

3. Swere. [Near King Sutton, N'tonshire, Gull.] Near Banbury, *A. Fr.* 1866.

4. Ray. Oddington, 1 plant, *Rev. Moyle Rogers*, Marston Lane.

5. Isis. Osier holt, near Godstow, South Leigh. In a field adjoining Tar Wood, *Sib.* Godstow Nunnery, *Bx.* Binsey Lane, *H. Bos.* Wolvercote.

6. Thame. The Long Meadows, Iffley, *H. Bos.* 1861–1867; do. 1880, *H. Garnsey.* Thame, *Bx. Hb.* Ch. Ch. Meadows; abundant about Dorchester, Drayton.

7. Thames. Common cornfield weed. Eye and Dunsden, *A. Fr.* Maple Durham, *A. Fr.* By Caversham Bridge, *Phyt. n. s.* ii. 338.

Berks. This groweth about one mile from Reading. *Hous. Phytol.* 1650. Bagley! Sonning, *F. Tufnail.* Pangbourne, *Newb.*

* **H. orientale, Br.** *Conringia orientalis, And.*

Syme, E. B. i. 148. 103. Cyb. Comp. 484. Nym. 42.

Casual. Waste ground. Rare. July–Aug. A.

3. Swere. Near Banbury Mill, near Grimsbury Wharf, *A. Fr.*

5. Isis. Near Osney Lock, on waste ground, 1885.

SISYMBRIUM. L.

S. Sophia, L. *Flkweed.*

Syme, E. B. i. 144. 98. Top. Bot. 46; extinct(?). Nym. 43.

Native. Viatical. Rubbish, way sides. Very rare. A.

First record, *Sibth.* 1794. Unlocalised.

3. Swere. Banbury Churchyard, *Gull.* North Newington, *A. Bees.*

Not in either place now, *Bees.* Meadows nr. Wharf, *J. Fr.* Nr.

Grimsbury, *A. Fr.* 1869. A casual. Meadow, S. Neithrop, *F. Fr.*

4. Ray. Norham Gardens 1870, *H. E. Garnsey.* Wall at Islip, 1858, near the Crescent, by the Cherwell, *H. Bos.* Waste ground near the Parks, *E. Foz.* Extinct.

5. Isis. Eynsham, *T. Westcombe.*

6. Thame. Thame, 1843, *W. Bx.*

Berks. Botley, *Dyer.* Frilford, 1884. Northants, not uncommon, Gloster, Warwick.

Morison believed this and similar weeds arose spontaneously—without seeds—see his *Preludia.*

***Sisymbrium thalianum*, Gay.**

Arabis Thaliana, L. Top. Bot. 40. Syme, E. B. i. 163. 115. Nym. 45. Native. Rupestral and agrestal. Sandy fields and walls. Local. A. April-May.

First record, *Morison*, 1680.

1. Stour. Tadmarton heath.

4. Ray. In agris circa Oxoniam, *Morison*, ii. 235, 1680. Stow Wood, *Sib.* Upper Heyford, *Rev. E. Fox*. In abundance in a field to the N. E. of Elsfield, 1830. Noke, Wood Eaton.

5. Isis. *Brassica spuria* caule magis foliosa hirsutior. On walls about Oxford, *Blackstone*, p. 8. South Leigh, *Sib.* Stonesfield, Binsey.

6. Thame. Iffley, *Sib.* Thame, *A. Fr.* Wheatley, G. Haseley.

7. Thames. Caversham, *Newb.* Checkendon, Nuffield, 696 feet.

Berks. S. Hinksey, Twyford.

* *S. Irlo*, L. *London Rocket*.

Cyb. Br. i. 151. Oxford. Nym. 43. Syme, E. B. i. 145. 98. Bx. 146. from an Oxford plant. Comp. Cyb. 'It did grow about Oxford 20 years ago, if not now.'

Denizen. Viatical. Rare. A. June.

First record, note in Dill. Ray, probably *Dr. Lightfoot*, circa 1760.

4. Ray. Under Merton Wall, near Physic Garden, as above; do. *Sib.*, Rose Lane, *Sib.*; do. *Bax.* 1811 in *Walk.*; do. in *Purton*, naturalized near the Danby gate of the Physic Garden, 1835, *Bx. Br. Pl.* See also for note on its occurrence after rubbish had been burnt, to prepare ground for the *Salicetum*. Newly made ground near Botanic Garden. *Hb. Br. Mus. Col. W. T. Dyer*. See report of *Bot. Ex. Club*, 1867. Oxford by the Cherwell. Self sown in Bot. Gard. *Journ. Bot. ix. W. T. Dyer*. Cherwell bank, *H. Bos.* Church Lane, on rubbish heap.

***S. officinale*, Scop. Common Hedge Mustard.**

Top. Bot. 45. Syme, E. B. i. 143. 96. Nym. 44.

Native. Viatical and agrestal. Road sides, waste places. P. May-August.

First record, *Sibth.* 1794. *Erysimum officinale*, L. Common throughout the county.

BRASSICA. L.***B. Rapa*, L. Wild Turnip.**

Var. rapifera, K. Syme, E. B. i. 140. 90. Nym. 46.

Colonist. Agrestal. Borders of fields and waste places. April-Sept.

First record, *Sibth.* 1794. No locality. 'Radice caulescente orbiculari depressa carnososa.'

3. *Swere*. Railside, Adderbury, *A. Fr.* Drayton, *R. Fr.*

4. **Ray.** Riverside, Lower Heyford, Tackley, etc.
5. **Isis.** Handborough, Charlbury, Osney, etc.
6. **Thame.** *Hb. Bz.* Thame, Cowley fields, Iffley, Dorchester.
7. **Thames.** Goring, Binfield, Whitechurch, etc.
- Berks.** Kennington.

B. Rape, L.

Var. sylvestris. Syme, i. 134. 89. *Naveu.*

Native. River sides. Locally common. June–August.

Frequent by the Thames from Sandford to Henley. See *Journ. Bot.* vii. viii. ix.

Ouse banks near Mixbury. Cherwell, near Heyford. Isis, near Wolvercote.

I suspect this to be the *Brassica Napus, radice caulescente fusiformi*, Sp. Pl. of *Sibth.* p. 204. Cornfields and ditch banks.

B. campestris, L. Summer Rape, Colza.

Syme, E. B. i. 133. 88. *Var. oleifera, D C.*

Alien. Sides of fields, waste places. A or B. May–July.

3. **Swere.** Betn. Cropredy and Morlington, *Dr. Goodenough in Sm.*
Fl. Br. Milton, A. Fr.

4. **Ray.** Marston, *H. Bos.*

5. **Isis.** Wolvercote, Osney.

6. **Thame.** Shotover.

* **B. Rutabaga, D C.** Swede Turnip.

R. campestris, var. Napo Brassica, D C.

Casual. Occurs as a waif from cultivation in various places. It is not permanent.

First record, *the Author*, 1879.

Kirtlington, Tackley, Shotover, Dorchester, Goring, Stonesfield.

Hardly distinct from foregoing.

SINAPIS. L.

S. nigra, L. Black Mustard.

Brassica nigra, K. Top. Bot. 49. Syme, E. B. i. 126. 85. Nym. 47. Baxt. 336.

Native. Viatical. Waysides and fields. Local. A. May–Sept.

First record, *Sibth.* 1794. Cornfields. No locality.

3. **Swere.** Near Cropredy.

4. **Ray.** Studley, towards Summertown, *H. E. Garnsey.*

5. **Isis.** Port Meadow, near Duke's Lock.

6. **Thame.** Near Thame, Menmarsh Farm, *A. Fr.* Thame, *Bz.*
Iffley, *H. Bos.* Cowley Marsh, *Bz. MSS.*

Berks. Cotham, Iffley, Sandford Lasher.

***Sinapis arvensis*, L.** *Charlock, Garlic.*

Brassica Sinapis, V. Top. Bot. 48. Syme, E. B. i. 124. 83. Nym. 47.
Native. Agrestal. Very common in cornfields from the north, southwards
to Mongewell, when *Sinapis alba* takes its place as a cornfield weed, on
the Chalk. A. May–Sept.

First record, *Sibth.* 1794.

***S. alba*, L.** *White Mustard, Charlock.*

Brassica alba, Bois. Top. Bot. 48. Syme, E. B. i. 125. 84. Nym. 47.
Colonist. Agrestal. Cultivated fields. Locally common. A. May–
August.

First record, *Sibth.* 1794. Cornfields. No locality.

1. **Stour.** Stourwell, *T. Bees.*

4. **Ray.** Kirtlington, *E. Fox.*

5. **Isis.** Near Chadlington.

6. **Thame.** Cowley fields, *Thame*, Bx. *MSS.*

7. **Thames.** Abundant throughout the Chalk district, taking the place
and name of Charlock, the *Sinapis arvensis* of northern and central
Oxfordshire.

Berks. Equally common on the Chalk in this county.

DIPLLOTAXIS. DC.

[*D. tenuifolia*, DC.]

Berks. On the walls of Reading Abbey and Windsor Castle; Northants
(Northampton Castle now demolished), Gloster; Warwick.]

***D. muralis*. DC.** *Wall Rocket.*

Brassica muralis, Bois. Syme, E. B. i. 140. 94. Nym. 49.

Denizen. Viatical. Glareal. Waste ground, Railway cuttings. A. or
B. July–Sept.

First record, *Baxter*, circa 1840.

3. **Swere.** Little Bourton and Cropredy, *A. Fr.* Somerton, *Mathews.*

4. **Ray.** Heyford Upper and Lower, by canal side and on railway
banks, *Rep. of Rec. Club*, 1883.

5. **Isis.** Port Meadow, *F. Bennett.* Osney, Oxford, *Hb. Bx.* Old
walls, Oxford, *Hb. Lawson*, 1869.

6. **Thame.** Dorchester, *E. Fox.* Littlemore, roadside.

7. **Thames.** Goring, *F. A. Lees.* Chinnor, North Stoke.

Var. Babingtonii, Syme. Waste ground near Gt. Western Railway
Station, Oxford. Sometimes recorded as *D. tenuifolia*. Under Railway
bridge, North Stoke.

Berks. Badley, *F. Bennett.* Tilehurst to Sonning, on Railway, *F.*
Tufnail. Moulsoford; Bucks; Northants; Gloster; Warwick.

** *Lunaria biennis*, *Mch. Honesty.* Nym. 50. Casual. Plantation

Tadmorton Heath, escaped from adjacent garden, *A. Fr.* Garden escape at Little Bourton, *J. French*, with distinctly opposite leaves.

COCHLEARIA. L.

C. Armoracia, L. *Horseradish.*

Armoracia rusticana, Bab. Syme, E. B. i. 183. 129. Comp. Cyb. 481. Nym. 51.

Alien. Banks of rivers, etc. P. June-Sept.

First record, *Sib.* 1794. *C. armoracia*, Sp. Pl. 904.

3. Swere. Cherwell side towards King's Sutton, *Bees*. Second March nr. Banbury, *R. French*. Mill Meadow, Banbury, *A. Fr.*

4. Ray. Bicester, Kirtlington.

5. Isis. Side of Canal nr. High Bridge, *Sib.* Near Bablock Hithe.

6. Thame. Banks of river nr. Iffley, *Sib.* / Nr. Thame, escape, *A. Fr.* Long Meadow Common, *Bx. MSS.*

Berks. Between Iffley and Sandford.

It does not appear to ripen its fruit, although well established by the river side.

EROPHYLLA. DC.

E. vulgaris, DC. *Whitlow Grass.*

Draba verna, L. Top. Bot. 38. Syme, E. B. i. 189. 134, fig. 1. Bx. 38. Nym. 54.

Native. Glareal, rupestral. Walls, dry banks, and cornfields. Common.

A. And generally distributed, Feb.-May.

First record, *Sib.* 1794.

Var. *E. brachycarpa*, Jord. *E. præcox*, DC.

Top. Bot. 38. Syme, E. B. i. 2. 190. 134. Nym. 54.

Native. Glareal, rupestral. Walls and stony gound. Local. A. March, April.

4. Ray. Water Eaton, Noke.

5. Isis. Stonesfield, Woodstock, Charlbury, Ramsden.

6. Thame. Headington, *Dyer*. Iffley, Wheatley. See *Rep. of R. C.* 1880.

Very variable, a form with the short silicula of *brachycarpa*, but so round as to have almost a circular section, occurred on Sparsey bridge, Water Eaton; this would be called by some Botanists *E. inflata*, Hook, to which it forms a passage; it is probably identical with the Warwickshire so called *inflata*. One or two of the Jordanian forms have also been noticed. On Iffley walls, with typical *verna* and *brachycarpa*, occurred a form with long nearly linear pods and diffuse habit, the petals small, narrow, and distant.

Berks. (*Brachycarpa*.) Bucks, Northants, Warwick.

** *Draba muralis*, L.

Syme, E. B. i. 191. 135. Casual. A weed in the Bot. Gard. Baxt. 1831.

* *Alyssum calycinum*, L.

Cyb. Br. i. 135. Syme, E. B. i. 196. 139. Nym. 57.

Colonist. Cornfields. Local and rare. A. June–August.

First record, *T. Beesley*, 1863.

1. Stour. Turnip field, Stourwell, 1863, *T. Bees*.

3. Swere. A solitary plant among clover, Constitution Hill, 1864,
do. foot road to South Newington.

5. Isis. Stonesfield, *F. T. Richards*, 1884.

7. Thames. Between Nuffield and Mongewell, 1881.

* *Camelina sativa*, Cr. *Gold of pleasure*.

Baxt. 447. Comp. Cyb. 481. Syme, E. B. i. 198. 141. Nym. 58.

Alien. Cornfields. Very rare, sporadic. July.

First record, *R. Walker*, 1832. Spec. in Hb. Lawson.

3. Swere. Foot road to Hanwell, *A. Fr.* Crouch Hill, *R. French*.
Broughton Mill, *T. Bees*.

4. Ray. Third field past Joe Pullin's Tree, Headington Hill, *R. Walker*.

6. Thame. Second field past Warneford Asylum, *H. Bos. Phyt.*
n. s. 4. 101.

7. Thames. A mile from Reading, *How's Phytologia*, 1650.

It is probably *C. fatida*, Fries.

Berks. Shooter's Hill, Pangbourne, *F. Tufnail*. Wokingham.

[*Vella annua*, L. Neithrop not uncommon. *Gulliver's list*. There is probably some mistake with regard to this plant. I have never met with it, *Beesley*. Some error of name is to be suspected, Mr. Newbould says the specimen in Sloane herb is *Reseda lutea*, *Comp. Cyb.* 482. In a copy of *Gulliver's list* given by him to Mr. Britten, the plant is enclosed in brackets as if there were some error.]

IBERIS. L.

** *I. umbellata*, L. Candy tuft.

Casual. Nyman 60. Bicester Cemetery, *A. Fr.* (*I. amara*). Railway bank, Kirtlington. Waste ground, Headington.

I. amara, L. *Candy tuft*.

Top. Bot. 32. Godley. Syme, E. B. vol. i. 149. Baxt. 351. Nym. 61.

Colonist. Agrestal. Chalky fields. Locally common. A. May–August.

North limit in Oxon., Beds., and Norfolk, well established in Oxon. Cyb. Br. i. 123.

First record, *Rev. — Williams*, 1765. And first in Britain.

3. Swere. As an escape by railways, *T. Bees*. Near Banbury.

6. Thame. Betn. Asylum and Bullingdon Green, *Bx. MSS.* 1823, *do.*
in Walk, do. H. Bos. 1864.

7. **Thames.** It has been lately found growing wild in the greatest plenty in many of the barren cornfields near Sir Thos. Stapleton's house in the parish of Grays, about 3 miles from Henley, and between Nettlebed and Minny Grove, adjoining to Home Wood in the parish of Peppard, and that neighbourhood where I was first shown it by the Rev. — Williams of Peppard, *MSS. note by Dr. Lightfoot*, in Dill. Ray. in Hort. Ox. and in Huds. Fl. Ang. in Hort. Ox. Henley, Nettlebed, Mongewell, *Sib.* Lewknor, Greenfield, *Gough's Camden.* Betn. Ibstone and Penley Hangings, *Bz. MSS.* 1824. Goring, *Mr. Darwall, in Walk.* Lewknor and Stokenchurch, *G. Coles, Esq. in Bz.* Maple Durham and Whitchurch, *Hb. Br. Mus. Trimen.* Stokenchurch, *Hb. Bz.* Chalk-pit nr. Flowing Spring, *A. Fr.* Caversham, Whitchurch, *Newb.* Maple Durham, etc., *Pamplin MSS.* Watlington, Nettlebed, Swincombe, Sherburn, *H. Bos.* Dunsden, *F. Arnold Lees*, Henley, *Hogg, and Johnson.* Chinnor, Cane End, near Woodcote, with purplish flowers, Ipsden, Crowell Hill.

Berks. Streatley, Compton Downs, Hurley, Pangbourne, Didcot, Basildon, Unwell Downs, Lowbury. Bucks, nr. Bledlow. Alien in Gloster, Northants, and Warwick.

The flowers are occasionally purplish blue.

THLASPI. L.

T. arvense, L. Penny Cress. Mithridate Mustard.

Top. Bot. 30. Syme, E. B. i. 202. 144. Nym. 62.

Colonist. Agrestal. Cultivated and waste ground. Local. A. May–July. First record, *Blackstone*; *Thlaspi Dioscoridis*, Raii, 1746.

1. **Stour.** Near the Stourwell.

2. **Ouse.** Mixbury.

3. **Swere.** Adderbury, Milton, *A. Fr.* N. Newington, *T. Bees.*

4. **Ray.** Nr. Stow Wood, *Sib.* Islip, *H. E. Garnsey.* Headington Wick, Blackthorn, Wood Eaton, Middleton Stoney, and Weston abundant.

5. **Isis.** About Charlbury and Chipping Norton, frequent, *Blackstone.* Broughton Poggs, *Dr. Goodenough, Bishop of Carlisle, in Curtis' Fl. Lond.,* and in *Sm. Fl. Brit.* Stanton Harcourt, South Leigh, *Sibth.* Church Handborough, Woodstock, Witney, *Chadlington.*

6. **Thame.** Shotover, Dorchester.

7. **Thames.** Caversham, a few plants in a turnip field, *Phyt. n. s. ii.* 340. Goring, *F. A. Lees.* Whitchurch, Cane End, Mongewell. Very abundant about Crowsey Farm, Whitchurch.

Berks. Foxcombe Hill, Cumnor, Dean Court, *H. Bos.* Frilford, Twyford.

T. perfoliatum, L. *Perfoliate Shepherd's Purse.*

Top. Bot. 31. extinct. E. B. 2354, from an Oxon sp. Baxt. 240. Nym. 62. Native. Glareal, rupestral. Dry stony pastures. Very local. A. March, April.

First record, *T. arvense perfoliat. minus* C. B., and first as British, J. Bobart, in Ray's Stirp. 1688.

5. *Isis*. Among the stone pits between Witney and Burford, J. Bobart, *Ray's Stirp*. 1690; *Ray's Syn.*, Ed. i. ii. and iii.; *Huds. Fl. Ang.*; and on Burford Downs, *Sibth.*, do. *Sm. Eng. Fl.* I believe it has not been found in any other part of Britain, do. in *Sm. Fl. Br.*, *Bot. Guide*, Hooker 1818, *New Bot. Guide*, Baxt. *Br. Pl.*, Walker, Purton, etc. It grows a little beyond the fourth milestone on the right hand from Witney to Burford with the green winged Bee orchis. The end of April and beginning of May, note in *Dill. Ray. in Bib. Hort. Ox.* about 1760, Dr. Lightfoot, a spec. from this locality in *Hb. Br. Mus. Col. T. Bicheno*. I am given to understand that the rapacity of unprincipled collectors has nearly or quite destroyed it in its old habitat on Burford Downs, *Phyt.*, vol. i., p. 129, 1842. *Wat. Top. Bot.* 23, extinct (?) Woodstock, in a cornfield on left hand side of road to Sturdy's Castle, 1859, *Hb. Ph. Soc.*, T. Thurland. Betn. Woodstock and Kirtlington, 1859, *H. Bos. in Journ. Bot.*, p. 17, 1871. These records refer to the same locality, see paper in *Linn. Journ.*, vol. xvi., p. 183, G. S. Boulger. Stonesfield and Fawler in great abundance, 1882, 1883, and 1884, see papers of *Record Club* for 1884. In *Syme's E. B.* it is stated to occur on Burford Downs; but this locality is now enclosed, and I have failed to find it near Witney or Woodstock. Sheep and slugs are very fond of it; they do not appear to touch *Erophila verna*, with which it grows. Near Lyneham barrow and Sarsden quarries very fine spec. 1885. A few plants from time to time have been found on Cumnor Hill, Berks: these owe their origin to a quantity of seed scattered there by Messrs. Boswell and Holliday about 1860.

This plant only occurs in Britain in the counties of Oxford and Gloucester.

[*T. alpestre*, L. Oxon. Top. Bot. 23, bracketed. Cyb. Br. i. 119. *T. perfoliatum*, L. has sometimes been called *alpinum*. There is not the slightest probability that *T. alpestre* has ever been found in Oxfordshire. The confusion in the Dillenian Ray caused by referring to *perfoliatum* forms of *alpestre*, Nicolson and Merrett, probably led to our Oxford plant being sometimes mislabelled—as in *Hb. Br. Mus.*—*alpestre*.]

THESDALIA. Br.**T. Iberis, DC.** *Shepherd's Cress.*

T. nudicaulis, Br. Top. Bot. 31. Syme, E. B. i. 209. 150. Nym. 63. Native. Glareal. Heaths. Very rare. A. May, June.

First record, *T. Beesley*, about 1875.

1. **Stour.** Tadmarton, *T. Beesley*.

Berks. Chorley Hurst, *Rev. A. Robertson*, 1884. Near Gt. Oakley,
F. Walker, Esq. Coleman's Moor, *Phyt.* iv. 745. *o. s.*

Bucks; Northants, extinct; **Warwick.**

LEPIDIUM. L.

[*L. Draba*, *L.* Syme, E. B. i. 158. 218. Nym. 64.

Alien. Waste ground. **Rare.** P. May-July.

Berks, Maidenhead. **Northants,** **Warwick.]**

* *L. sativum*, *L.* *Garden Cress.*

Comp. Cyb. 481. Syme, E. B. i. 215. 155. Nym. 65.

Casual. Waste ground. **A.** May-July.

Hanwell, 1864, *A. Fr.* Brookside Thame, *A. Fr.* Port Meadow, **Ifley.**

L. campestre, *Br.* *Mithridate Pepperwort.*

Top. Bot. 33. Syme, E. B. i. 216. 156. Nym. 95.

Native. **Agrestal.** Cornfields. **Local.** B. June-September.

First record, *Thlaspi campestre*, *Sib.* 1794.

1. **Stour.** Fields about Tadmarton Heath, *O. V. Aplin.*

3. **Swere.** Near Shutford, very rare, *Bees.*

4. **Ray.** Headington Wick, **Elsfield**, *H. Bos.* Noke, **Islip**, **Blackthorn.**

5. **Islip.** South Leigh, **Stanton Harcourt**, *Sib.* **Woodstock**, *A. Fr.*
Witney, *H. Bos.* **Wychwood**, *Hb. Linton.* Mill Wood! Plentiful
in cornfields betn. **Spilsbury** and **Wychwood**, *T. Bees.* **Charlbury**,
Finstock.

6. **Thame.** Betn. **Bullington Green** and **Shotover**, *Bz. in Walk.*
Cowley, *H. E. Garnsey.*

7. **Thames.** **Caversham**, *Newb.*

Berks. **Didcot**, *F. Bennett.* **Sonning cutting**, *F. Tufnail.*

L. heterophyllum, *Benth.*

L. Smithii, *Hook.* Syme, E. B. i. 217. 157. Nym. 65.

Native. Dry banks. Very rare. P. July.

First record, *Mr. Bolton King* and *Rev. A. Robertson*, 1881.

6. **Thame.** **Bullington Green**, 1881, *King* and *Robertson.*

The *Rev. E. Fox* believes he has seen this about **Stow Wood.**

Berks. **Sonning cutting**, **Burfield meadows**, *F. Tufnail.* **Northants**
rare, **Gloster**, **Warwick rare.**

** *L. rudérale*, *L.* Syme, E. B. i. 214. 154. Nym. 64.

Casual. Railway side, **Port Meadow!** *Rev. F. Bennett, Rep. of Rec.*
Club. 1881.

Warwick casual, **Gloster W.**

** *L. Iberis*, *L.*

Alien. *Phyt. n. s. ii.* 113, *Max. T. Masters.*

CORONOPUS. Hall.

C. procumbens, Gil. *Swine's Cress, Swine's Scurvy Grass.*

C. Ruellii, All. Senecioia Coronopus, Poir. Top. Bot. 29. Syme, E. B. i. 221. 159. Nym. 65. Baxt. 320.

Native. Glareal and viatical. Waysides, muddy places. A. or B. June-September.

First record, *Sib. 1794, Cochlearia Coronopus.*

3. **Swere.** Banbury, *A. Fr. Beesley list*, on roadsides and walls.

4. **Ray.** Marston, etc., *R. Linton. Deddington, H. Bos.* Blackthorn, Oddington, Horton, Noke.

5. **Isis.** Binsey, South Leigh, *Sib.* Eynsham, Blenheim, *H. Bos.* Foxcott, Wolvercote abundant, Port Meadow.

6. **Thame.** Cowley, *Sib.* Thame, *Hb. Bx.* Headington, betn. St. Clement's and Cowley, *Bx. MSS.* Shotover, Dorchester, Bullingdon.

7. **Thames.** Caversham, *F. Tufnail.* Chamber's Green.

Particularly fond of the muddy margins of ponds, or on ground from which the turf has been removed by cattle traffic.

CAPSILLA. Mch.

C. Bursa pastoris, L. *Shepherd's Purse.*

Top. Bot. 31. Syme, E. B. i. 211. 152. Baxt. 19. Nym. 66.

Native. Agrestal, pascual. Waysides, etc. Everywhere common. (Often about Oxford with *Uredo Thlaspi* and *Botrytis parasitica*. The latter is parasitic on the *Uredo, Bx.*) Very variable. A. March-November.

First record, *Sibth. 1794, Thlaspi Bursa Pastoris.* Unlocalised.

The entire leaved form *integrifolia* is also frequent.

ISATIS. L.

* **I. tinctoria, L.** *Dyer's Weed. Wood.*

Casual. Very rare. Syme, E. B. i. 222. 161. Nym. 67.

3. **Swere.** Fields between Broughton and North Newington. It is or was cultivated at the latter place, *Gulliver.*

7. **Thames.** Cornfields near the Ferry about two miles below Goring, *Hb. Lawson, 1871.*

Berks. Wantage, *H. Trimen, 1866.*

ORD. VII. RESEDACEÆ, DC.

RESEDA. L.

Reseda lutea, L. *Base Rocket. Wild Mignonette.*

Top. Bot. 52. Syme, E. B. ii. 2. 162. Baxt. 15. Nym. 69.

Native. Viatical. Waysides and fields on a chalky or calcareous soil. Local. P. July-Sept.

First record, *Sir Joseph Banks*, 1760.

2. **Ouse.** Fringford, very scarce, *Dr. Woodward in Bz.* Mixbury.

3. **Swere.** Hanwell, *R. French.*

4. **Ray.** Near Oxford, *Herb. Br. Mus., Joseph Banks.* Bayswater, *H. Bos.* Between Steeple Aston and Rousham, *Bz.* Kirtlington, Headington Wick.

5. **Isis.** Charlbury, *R. Linton.* Stonesfield, Minster Lovell, Brize Norton.

6. **Thame.** Wheatley, *Mr. J. Lovegrove in Walk.*, 1828. Thame, *Hb. Bz.* Bensington, *Sib.* Dorchester, *Bennett.*

7. **Thames.** Henley, *Sib.* Caversham, *J. Carroll, Hb. Br. Mus.* Goring, Watlington, Ewelme, *H. Bos.* Beacon Hill, Henley Park Hill, Ipsden, Whitchurch.

Berks. Frilford, Unwell Wood, Moulsoford, and in Gloucester, Bucks, and Northants, but only as a casual in Warwick.

H. Luteola, L. *Dyer's Rocket. Weld.*

Top. Bot. 51. Syme, E. B. ii. 4. 164. Nym. 69.

Native. Vistical. Dry banks, walls, common. B. June-Sept.

First record, 'with striped leaves,' *Plot*, 1677.

2. **Ouse.** Mixbury.

3. **Swere.** Bretch, *F. French.* Broughton, Swalecliff, *A. Fr.* Bodicote Road, *Gulliver.* Somerton, Tadmarton.

4. **Ray.** Between Middleton Park and Fritwell, *A. Fr.* Headington Wick, Elsfield, Stanton St. John, *H. Bos.* New College Lane, Stow Wood, Gibraltar Rock.

5. **Isis.** Wychwood, *Hb. Lawson.* Woodstock, Witney, *H. Bos.* Near Oxford, *Hb. Banks.* Stonesfield, Minster Lovell, Wall in Geo. St. Mews.

6. **Thame.** Clifton Hampden, *Bennett.* Shotover, Wheatley, Gt. Haseley.

7. **Thames.** Chalk pit near Flowing Spring, *A. Fr.* Caversham, *Newb.* Goring, Mongewell, Cane End, Whitchurch.

Berks. Tubney, Wytham, Cunmor.

** *R. odorata, L.* *Sweet Mignonette.*

Casual. Manure heap near Bodicote by the canal side, *A. Fr.* Waste ground near Gt. Western Railway Station, Oxford, Osney.

ORD. VIII. CISTINEÆ, DC.

HELIANTHEMUM, G.

H. Chamæcistus, Miller. *Rock Rose.*

H. vulgare, G. Top. Bot. 52. Syme, E. B. ii. 10. 158. Nym. 74. Bz.

Native. Pascual. Dry hilly pastures and roadsides on chalky or calcareous soil. P. June–Sept.

First record, *Sib.* 1794. *Cistus Helianthemum*, L.

1. **Stour.** Sibford Heath.
2. **Ouse.** Mixbury, *R. Pryor.* Hardwick, Ardley.
3. **Swere.** Bretch, Hook Norton, *Gull.* Tadmarton, *Aplin.* Towards Shutford, *T. Bees.*
4. **Ray.** Between Middleton Stoney and Somerton, *A. Fr.* Headington Wick, *H. Bos.* Beckley, Stow Wood, Stanton St. John quarries, Ardley.
5. **Isis.** Woodstock Park and Stonesfield, *Bz. MSS.* 1831. Charlbury, Stonesfield, Finstock, Wychwood, Ditchley, Minster Lovell, Burford, near Ashford Mill, Lyneham Camp, Knoll Bury Camp, Tainton quarry.
6. **Thame.** Near Woodperry, *A. Fr.* Headington, in great plenty, *Bz. MSS.* Shotover Hill, Bullingdon Green, *Sib.* Holton quarries.
7. **Thames.** Stokenchurch, *Sib.* Caversham, *Hb. Br. Mus. Trimen.* Between Shiplake and Henley, *A. Fr.* Henley, *H. Bos.* Maple Durham, Whitchurch, Goring, most abundant near Chinnor, Cane End, Withy Coppice, Penley Wood, Ibstone, Lewknor, Beacon Hill, Ewelme Downs.

ORD. IX. VIOLARIÆ, DC.

VIOLA. L.

V. sylvatica, *Fr.* *Dog Violet.*

Native. Septal, ericetal. Woods and heaths; common and generally distributed. P. Apr.–June.

Var. Reichenbachiana, *Jord.* *Top. Bot.* 56 *Druce, Rec.* *Syme, E. B. ii.* 20. 174.

Thickets, hedgebanks, on calcareous soil. P. April–May.

2. **Ouse.** Ardley, *Rec. Club Rep.* 1880.

4. **Ray.** Near Tackley.

5. **Isis.** Near Ashford Mills, Wilcote, Wychwood, Fawler, Stonesfield.

Var. Riviniana, *Rehb.* *Syme, E. B. ii.* 19. 173. *Dog Violet.*

Native. Woods, thickets, hedgebanks, etc. Common and generally distributed. P. April, May.

Very large flowered form near Lyneham Camp.

Var. flavicornis. *Forst. non. Sm. E. B. Sup.* 2736.

5. **Isis.** Dry heaths, North Leigh.

V. canina, (*L.*) *Rehb.* *Dog Violet.*

Syme, E. B. ii. 21. 175. *Nym.* 77.

Native. Ericetal, pascual. Sandy heathy ground. Rare. P. May–June.

First record, *H. Boswell*, about 1862.

1. **Stour.** Tadmorton Heath, *T. Bees*.
 3. **Swere.** Bloxham Road, Adderbury, and Milton, *A. Fr.* Crouch Lane, *R. French*. Hanwell Heath, *T. Bees*.
 4. **Ray.** Near Upper Heyford on sandy peaty ground.
 5. **Isis.** Coombe Wood, *H. Bos.* Wychwood.
 6. **Thame.** Near Shotover and Wheatley, *H. Bos. Phyt.* 5. 154, *n.s.p.* 100.
 7. **Thames.** Goring Heath, Binfield, Ibstone Common, Crowell Hill, Nettlebed.
- Berks.** Pusey, Buckland, *H. Bos.* 1858. Wootton, Bagley Wood, Bucks, Gloucester, Warwick.

V. lactea, Sm. *Dog Violet.*

Syme, E. B. ii. 22. 176. Nym. 77.

Native. Ericetal. Heaths. Very Rare. P. April, May.

First certain record, *the Author*, 1884.

4. **Ray.** Otnoor, 1820. One specimen, in *canina* sheet in *Herb. Sherard*, of this species is without collector's name; it has been (with many other plants) inserted by some person much to the detriment of the collection.
 7. **Thames.** Binfield Heath, almost extinct.
- Berks.** Bagshot Heath, *H. C. Watson*. Bucks, Dropmore, *Rep. of Rec. Club*, 1881. Warwick, Kersley Common, very rare. Gloster. W.

V. odorata, L. *Sweet Violet.*

Top. Bot. 54. Syme, E. B. ii. 14. 171. Nym. 78.

Native. Septal. Generally distributed; more frequent on oolites, clay, and cornbrash, than on sand or chalk. P. Mar.—April.

First record, *Sib.* 1794.

Var. cærulea.

2. **Ouse.** Mixbury, Ardley, Hethe.
 3. **Swere.** Banbury, very common, *Gull.*, the common form, *Bees*. Between Cropredy and Williamscoth, abundant, *A. Fr.* Somerton.
 4. **Ray.** Water Eaton, *H. Bos.* Noke, Islip, Bucknell, Middleton Stoney, Thrupp, etc.
 5. **Isis.** Church Handborough, *Bz. MSS.* 1833. Bladon, Woodstock, Stonesfield, etc.
 7. **Thames.** Goring.
- Berks.** Wytham, Bagley, Cumnor, Radley.

Var. alba.

2. **Ouse.** Ardley, Mixbury, Hardwick.
3. **Swere.** Banbury, *A. Fr.* Somerton, on clay soil, *T. Bees*.
4. **Ray.** Noke, Elsfield, Bicester, Bucknell.

5. **Isis.** Stonesfield, Wychwood, Charlbury, Handborough, Begbroke.

A plant of *V. imberbis*, Leight. occurred with type at Bladon.

6. **Thame.** Tetsworth.

Berks. Wytham, Hinksey, Cumnor.

The purple flowered form occurred at Thrupp and near Charlbury. A lilac coloured form is not uncommon. The Violet is, I believe, a native in Oxfordshire.

V. hirta, L. *Hairy Violet.*

Top. Bot. 55. Syme, E. B. ii. 17. 172. Nym. 78.

Native. Septal. Hedgebanks, wood borders, grassy places, etc.
Common. P. March-May.

First record, *Viola martia hirsuta major inodora* and first as British 'Flowers in March and April and the flowers are abusively sold to the shops amongst other violets, they not being so good for any of those uses the Apothecaries put them to, as the other violets are, *Plot*, 1677, p. 147. They grow plentifully in Mag. Col. Coppice, on Shotover Hill, Stow Wood, and many other places.'

1. **Stour.** Sibford Heath.

2. **Ouse.** Mixbury, Ardley, Stoke Lyne.

3. **Swere.** Bodicote, Gull. Crouch Lane, Bretch, Bees. Horley,
A. Fr. Broughton, O. Aplin. Swerford, Mrs. Davis.

4. **Ray.** Stow Wood, *Plot*. Kirtlington, Headington Wick, Elsfield,
H. Bos. Beckley, Bucknell, Ardley.

5. **Isis.** Several parts of Wychwood, *Blackst. MSS.* 1737. Near Oxford, *Hb. Banks*, *Hb. Br. Mus.* Much the commoner about Oxford, we have no chalk but it occurs upon clay, gravel, and limestone, in woods, sides of ditches, in peat bogs, on hill sides, and even in clay pits dug out for bricks, *Phyt.* 5. 154, *H. Bos.* Southcombe, *T. Bees.* A form with narrower petals at Cornbury quarries, but not quite *V. calcarea*, Bab. Woodstock Park, Charlbury, Stonesfield, Burford, Wychwood, Ditchley, etc.

6. **Thame.** Shotover, Mag. Col. Copse, *Plot*. Do. in *Ray's Stirp.* 1688; do. in *Ray's Syn.* 1690, etc. Cheney Lane, Sib. Sydenham, *Hb. Bz.* Bullington, *Bos.*

7. **Thames.** Maple Durham, Goring, Bledlow Ridge, *H. Bos.* Chinnor, Penley Wood, Henley, Fawler, Lewknor, Mongewell, abundant on the chalk.

Berks. Wytham, Bagley, Pangbourne, Streatley, Sinodon Hill.

With white flowers at Ardley and Stonesfield.

V. permixta, Jord. Nym. 87.

Native. Septal and pascual. Dry hedgebanks and grassy places.

Local. P. March, April.

First record, *the Author*, 1882.

2. Ouse. Ardley.

3. Ray. Kirtlington.

5. Isis. Fawler, Woodstock.

Berks. Wytham; Northants, Courteenhall.

This is always found with *odorata* and *hirta*.

Var. V. sepicola, Jord. Nym. 78.

2. Ouse. Ardley.

V. palustris, L. *Marsh Violet*.

Top. Bot. 53. Syme, E. B. ii. 13. 17. Nym. 79.

Native. Uligin. Marshes. Rare; almost extinct. P. April-June.

First record, Plot 1677, and first as British *V. palustris rotundifolia glabr.*, with figure.

4. Ray. Betn. Oxford and Water Eaton, Cherwell side, Plot; also in *Ray's Stirp.*, *Syn.*, *Huds.*, *Gough's Camden*, etc. Sibthorp omits it (by an oversight); bogs near Stow Wood.

The cleistogamous flowers produce the seed, they may be found as late as August.

Berks. Wootton Heath, *Walk*. Childswell Farm, *Hb. Dill*. 1744.

Birch Copse, *T. Thurland*. Burghfield Common, *F. Tufnail*.

A plant which another decade will probably remove from our list. Not recorded for Northants, Bucks, E. Gloster; but is locally common in Warwick.

V. tricolor, L. *Heart's ease*, *Wild Pansy*.

Top. Bot. 57. Syme, E. B. ii. 24. 178. Nym. 80.

Native. Agrestal. Cultivated ground. A. or B. May-Nov.

First record, *Sib*. 1794, including *arvensis*. Not localised.

2. Ouse. Mixbury.

3. Swere. On a wall at Neithrop, *Gull*. Wykeham lane, fields, common, Hook Norton, *A. Fr*. Banbury, common, *Bees*.

4. Ray. Wood Eaton, *R. Linton*. Stow Wood, *H. Bos*.

5. Isis. Stonesfield, Chadlington.

6. Thame. Cuddesdon, Littlemore; flowers all purple.

7. Thames. Stokenchurch, *H. Bos*. Goring, Woodcote.

Berks. S. Hinksey, Boars Hill, etc.

A very variable plant. Many of the Jordanian forms doubtless occur.

Var. arvensis, Murr. Syme, E. B. ii. 25. 179.

Native. Common in all the districts. In cultivated fields much more frequent than *tricolor*

Var. mentita, Jord.

7. Thames. Woodcote, Cane End, Stokenchurch, and elsewhere in cornfields on the Chilterns.

Berks. Frilford.

Another violet with large petals, all yellow, is referred to the *Var. Sagoti* of Gren. and Godr. See *Rep. of Rec. Club*, p. 205, it occurs about Stow Wood.

[* *V. lutea*, *Huds.*

Ambiguity or casual. 'A patch of plants grew one year in a sandy field by Headington Wick Copse, and disappeared the year after; I never saw any more.' *H. Ridley, MSS.* I have never seen this, and had the observer been one less acute and correct than Mr. Ridley, I should have conjectured the large flowered form of *Viola tricolor* had been mistaken for it.]

ORD. X. DROSERACEÆ, DC.

DROSERÆ. L.

? *D. rotundifolia*, *L.* *Sundew.*

Top. Bot. 59. Syme, E. B. ii. 30. 182. Nym. 82. Baxt. 201.

Native. Uliginal. Bogs. Extinct. P. May-June.

First record, *Wm. Coles*. 'Adam in Eden,' 1657.

5. Thame. Shotover Hill, on that side towards Headington Quarry, in Oxford, *Wm. Coles* and *Sib.*

Berks. Bagley Wood, *Wm. Coles*, 1657. *Do. E. Fox*, Bulmershe Park, *F. Tufnail*. Frilford Heath, 1884. Northants, extinct. Bucks, Warwick.

[*D. intermedia*, *H.* Syme, E. B. ii. 133. 184.

Berks. Bulmershe Park, *F. Tufnail*. Bagshot, *Dill. Ray*. Early common. In Bucks, Gloster, W.]

PARNASSIA. L.

P. palustris, *L.* *Grass of Parnassus.*

Top. Bot. 184. Syme, E. B. 4. 565. Nym. 82. Baxt. 470.

Native. Paludal. Bogs and marshy places. Rather rare. P. Aug.-Oct.

First record, 'in the middle of the great town field of Headington, about a mile from Oxford, and on the other side of Oxford in the pastures next unto Botley in the highway.' *Parkinson, Theatrum Botan.*, p. 429, A. D. 1640. *Do. Bz.* 1832.

2. Ouse. Cottisford, Fringford, Westbury (Bucks), *R. C. Pryor*.

3. Swere. Bog south of Shutford bridge, *T. Beesley*. This, the only station of this very elegant plant in this neighbourhood, will probably from its situation escape drainage, which destroys so many of our rare plants. Near Worton Wood, *T. Bees*.

4. Ray. Weston peat pits, sparingly, *W. Wilson Saunders*. Bog

- north side of Upper Heyford, *Bx. Br. Pl.* Beckley Grove meadow, *Rev. W. Moyle Rogers.* Noke Wood, *H. Bos.* Headington Wick, *Sib.* In a bog north of parsonage house, Upper Heyford, *Bx. in Walk.* Kirtlington, *Rev. E. Fox.*
5. *Isis.* Southcombe, near Chipping Norton, *Mr. Atkins.* By the Windrush, near Witney, *H. Bos.* Betn. Heythrop and Enstone, *T. Westcombe.*
6. *Thame.* Bullingdon peat bogs, *Sib.* Shotover Hill, *Bx. in Purton.* Sandford Park, *Hb. R. Linton,* 1863. Latchford bog, near Great Haseley, *Miss Armetriding.*
- Berks.** In the pasture next into Botley, *Parkinson Theat.,* 1640 and 1832, *Bx.* Wootton, *H. Bos.* Frilford, abundant.

ORD. XI. POLYGALEÆ, *Juss.*

POLYGALA. L.

[*P. vulgaris*, *L.* Aggregate. *Milkwort.*

Native. Ericetal. Glareal, etc. Dry pastures, heaths, etc. Generally distributed. *P.* May-Aug.

First record, *Sib.* 1794.

P. vulgaris*, (*L.*) *Schk. Segregate. *Milkwort.*

Syme, *E. B. ii.* 35. 185. *Nym.* 83.

Native. Banks, wood borders. Common on the chalk. *P.* May-July.

First record, *A. French*, 1868.

3. *Swere.* Hanwell, *A. Fr.*

4. *Ray.* Headington Wick, railside near Bicester.

5. *Isis.* Ditchley, Wootton.

6. *Thame.* Menmarsh Farm, *A. Fr.*

7. *Thames.* Whitchurch, *see Rep. of Rec. Club,* 1880, Goring very fine. Mongewell, Beacon Hill, Penley Wood, red flowers. Chinnor, white and pink. Stokenchurch, pale blue. Ipsden, Fawley, Bledlow. Flowers dark blue, light blue, magenta, pink, white.

Berks. Streatley, Tilehurst; Bucks; Northants; Gloster; Warwick.

P. serpyllacea*, *Whe. *Milkwort.*

P. depressa, *W.* *Top. Bot.* 61. Syme, *E. B. ii.* 38. 187. *Baxt.* 251 'vulgaris.' *Nym.* 83.

Native. Ericetal and pascual. Heaths and dry pastures. Common. *P.* April-August.

First certain record, *Beesley*, in *Top. Bot.* 1873.

Generally distributed. Rare on Oxford clay. Flowers usually deep blue, but white, pale blue, and pink flowered forms are also found. The

plant is very typical on Shotover Hill. On the chalk hills it is replaced to a great extent by *vulgaris* and *calcareae*. The variety with ciliate bracts, pedicels and sepals is *P. ciliata*, Lebel. A form closely allied to *calcareae* occurs on Tainton Quarries, and by the roadside between Burford and Brize Norton.

***P. oxyptora*, Rehb.** Syme, E. B. ii. 36. 186. Nym. 83.

Native. Pascual. Rare or overlooked. Dry pastures. P. June, July. First record, *the Author*, 1881.

7. Thames. Lewknor on chalk hills.

Warwick, Honington, in the Stour drainage.

***P. calcarea*, F. Sch.** Chalk Milkwort.

Top. Bot. 62. Syme, E. B. ii. 38. 188. Nym. 83.

Native. Glareal. Chalk downs and stony places. Locally common.

P. May-July.

First record, *F. Duthie*, Report of Bot. Ex. Club, 1870.

5. Isis. Burford Quarries and roadside, near the county border.

7. Thames. Swincombe Downs, *Duthie*. In Oxon, *A. W. Bennett*, *Journ. Bot.* xv. 173. Goring, *Hb. Lawson*, 1871. Near Henley, *H. Bos.* Watlington, Grime's Dyke, rare on Beacon Hill, abundant on Ewelme Downs and Common. Thins out very much to the East, its place being taken by *P. vulgaris*.

Berks. Ilsley and Compton, *H. Bos.* Abundant on Streatley Hill, Moultsford, Pangbourne, Basildon, also in E. Gloster and Bucks.

Varies with flowers dark blue, light blue, lilac, pink, red, and white.

In the oolite very dark blue.

This appears to be a well marked species.

[*Elatine hexandra*, DC. Burfield Heath and near Virginia Water, Berks; Warwick, Coleshill pool extinct?].

ORD. XII. CARYOPHYLLÆ, Juss.

GITHAGO. D.

***Githago Segetum*, Desf.** Corn Cockle.

Agrostemma Githago, L. Top. Bot. 68. Syme, E. B. ii. 74. 215. Bx. 175. Nym. 85.

Colonist. Agrestal. Cornfields. Local. A. June-Aug.

First record, *Sib.* 1794. Unlocalised.

1. Stour. Sibford.

3. Swere. Hanwell, *A. Fr.*

4. Ray. Common about Upper Heyford, Bx. MSS. Headington Wick, *H. Bos.* Islip, Stow Wood, Kirtlington.

5. **Isis.** Common about Church Handborough, *Bz. MSS.* Witney, *H. Bos.* Charlbury, Ditchley.
6. **Thame.** Between Bullingdon and Shotover, *Bz. MSS.* Shotover near Horsepath.
7. **Thames.** Ewelme, *H. Bos.* Mongewell, Goring, Henley, North Stoke.

Berks. Pusey, *H. Bos.* Frilford.

Near North Stoke this appeared in such abundance as to give a lavender blue tint to the field of vetches in which it grew.

LYCHNIS. L.

L. Flos-cuculi, L. *Ragged Robin.*

Top. Bot. 67. Syme, E. B. ii. 71. 212. Bz. 71. Nym. 85.

Native. Paludal. Wet meadows; common. P. May-Aug.

First record, 'Gosforth Bridge, *Mr. Stonehouse*,' *Phytologia*, 1650. 'Armoraria foemina flore albedo elegantior.'

Generally distributed, but rather rare on the chalk, except by the river side. With white flowers at the base of Shotover on South Side, at Gosforth Bridge, see above, and in a field by Atkin's Lime Kilns, Banbury, *T. Bees.*; also in Berks in the lane from Abingdon Road to Bagley Wood, *Bz.*; and in meadows at Moulsoford.

L. diurna, Sib. *Red Champion.*

Melandryum sylvestre, R. *Silene diurna*, G. et G. Top. Bot. 67. Syme, E. B. ii. 69. 211. Nym. 86.

Native. Septal. Damp woods and hedges, etc. Locally common. P. May-Sept.

First record, *L. sylvestris minus hirsuta flore rubello simplici circa Oxonium ad margines sepium silvarumque humidior, passim Morison*, ii. 541. 1680.

1. **Stour.** Near Sibford.
3. **Swere.** Rare about Banbury, but frequent about Drayton and Wroxton, at South Newington a variety with flesh-coloured flowers, but with the other characters of *diurna*, very distinct, is common, *Beesley*. Also at Upton and Edgehill, Hanwell, *Miss Rusher*. Clattercut reservoir.
4. **Ray.** With white flowers near Muswell Hill, Noke Wood, etc.
5. **Isis.** Bladon, *Rogers*. Handborough.
6. **Thame.** With *Puccinia Lychnidearum* about Oxford, near Shotover plantation, 1826, *Bz. MSS.* Near Thame, *A. Fr.* Nuneham, Cuddesdon, Albury, Horspath, etc.
7. **Thames.** Mongewell near Binfield, Cane End.

Berks. Tubney, etc.

With white flowers by rail side near Wheatley, and in the North of the

County pale flowered forms are frequent, some of these appear to be natural hybrids.

L. vespertina, Sib. *White Champion*.

Melandryum pratense, R. *Silene pratensis*, G. et G., a singularly inappropriate name. *L. alba*, Mill.

Top. Bot. 67. Syme, E. B. ii. 68. 210. Nym. 86.

Native. Agrestal, septal. Hedges, fields, etc. Common and generally distributed. B. and P. May-Oct.

First record, Plot 1677 '*L. sylvestris flor. alb.*, Ger. One kind with yellow stamens, and a flower circle in middle; and another without the flower circle and with purple stamens. In the first of these the seed vessel not appearing at all, and in the second withering away with the flowers; it occurs by Holywell and the New Park,' p. 150.

With pink flowers near Nettlebed and Clattercut. The anthers are often attacked with a fungus.

SILENE. L.

S. Cucubalus, Wib. *Bladder Champion*.

S. inflata, Sm. Top. Bot. 64. Syme, E. B. ii. 56. 199. Nym. 88. Bx. 120.

Native. Pascual. Waysides, fields, etc. Common and generally distributed. P. June-Aug.

First record, '*Papaver spumeum* in Oxfordshire with striped leaves,' Plot 1677.

The glabrous plant is more frequent on clay and in damp places. Mr. Baxter found *Ecidium Behen*, DC. for the first time in Britain near Bullingdon, and *Uredo Behenus*, DC., on the same plant. Occasionally *puberula* is found with the type.

The pubescent variety *S. puberula*, Jord. was first noticed in Merrett 1666, as '*Behen album hispidum*, the Hairy Spatling Poppy, plentiful about Oxford.'

1. Stour. Tadmarton.
2. Ouse. Mixbury.
4. Ray. Headington Wick, etc.
5. Isis. Charlbury, Sarsden, etc.
6. Thame. Bullingdon.

7. Thames. The common form on the chalk occurring often as a semi-prostrate plant in chalky fields.

Berks. Moulsoford, Pangbourne, etc.

S. noctiflora, L.

Top. Bot. 66. Syme, E. B. ii. 66. 209. Nym. 93.

Colonist. Agrestal. Sandy cornfields. Local, but often overlooked.

A. July-Nov.

First record, *Sib.* 1794.

1. **Stour.** Between Sibford and Tadmorton Heath, *A. Fr.*
3. **Swere.** Hook Norton, *A. Fr.*
4. **Ray.** Headington, *Sib.* Between Kirtlington and Bletchington, *Miss Mary Saunders.* Kirtlington, *H. Bos.* Headington Wick, *H. Ridley.* Stow Wood, Tackley, between Marston and Water Eaton.
5. **Isis.** Stanton Harcourt, South Leigh, *Sib.* Near the Rollerich Stones, *A. Fr.* Church Handborough, Ditchley.
6. **Thame.** Cowley, *Sib.* Nuneham, *E. Walford.* Cowley Lane and Shotover, near the Windmill, *Bz.* 1819 *in Purton.* Bullingdon, *Bos.* Between St. Clement's and Iffley, *Bz.* 1823. Dorchester, *Rev. F. Bennett.* Cuddesdon, Clifton Hampden.
7. **Thames.** Woodcote, Goring, Chinnor, etc.
- Berks.** Between Ferry Hinksey and Cumnor, Wytham, *Bz.* Boar's Hill, Frilford, Moulsoford, etc.

The yellow exterior of the flowers with rose coloured interior, and the very viscid hairs offer ready means of distinguishing this plant at a glance from *Lychnis vespertina*

** *S. dichotoma*, *Ehrh.* Nym. 93.

Casual. Mill Wood, Church Handborough, probably introduced with pheasant corn.

***S. anglica*, L.**

Syme, E. B. ii. 60. 202. Nym. 97.

Colonist. Agrestal. Sandy cornfields. Very rare. A. July.

First record, *Rev. E. Fox*, about 1860.

4. **Ray.** Headington and Stanton St. John, *Rev. E. Fox.* Field at end of Headington Wick Marsh, *H. Ridley, M.A.*

Berks. Near Wellington Coll., *Penny.* Newbury, *N. B. G. quinquevulnera.* No record for Gloster, very rare in Northants, a casual in Warwick.

[*S. conica*, L. Near Newbury, Berks, *H. Bos.* 1858.]

SAPONARIA. L.

** *S. Vaccaria*, L.

Casual. On mud thrown out of Canal near Grimsbury Wharf, 1867, *A. Fr.* On mud dredged from river near Osney! *F. T. Richards, M.A.* 1884. Bullingdon, near the Barracks, 1885.

***S. officinalis*, L.** Soap Wort.

Syme, E. B. ii. 53. 197. Nym. 98. Baxt. 37.

Denizen. Vistical. Hedges and waste places. Rare. P. Aug.

First record, *Sib.* 1794.

4. **Ray.** Marston, *Walk. Fl.* On right hand side of turnpike going

from Oxford to Woodstock, between double ditch and watering trough, *Bx.* 1821.

5. *Isis.* Stanton Harcourt, *Sib.* Prison Lane, Charlbury, *J. M. Albright.* North Leigh and Woodstock, *Prof. Daubeny*, 1841. Beyond Burford in hedge, well established.
 6. *Thame.* Headington Hill, *Sib.* Ditto a little above Cheney Lane, 1849, *Bx.* Ditto, *H. Bos.* 1857.
 7. *Thames.* Between Whitchurch and Coomb in a hedge some distance from houses, well established; between Goring and Whitchurch.
- Berks.* Meadow at Blewberry, *H. Bos.* Streatley, *Compt. Hist.* Gloster near Kempford, Warwick, Northants extinct '*concava*.'

DIANTHUS. L.

** *D. Caesius*, *Sm.* *Cheddar Pink.*

Top. Bot. bracketed. Syme, E. B. ii. 48. 193. Nym. 101.

Alien. Wadham Walls, Oxford, *Hb. Br. Mus. coll. H. Trimen.* Pembroke Coll. Walls, introduced by the late Master, *Hb. Lawson.* Near the entrance to the Cathedral, *Journ. Bot. IX., W. T. Dyer.* Still on Wadham Wall, and also on a wall at the back of the College.

D. Armeria, *L.* *Deptford Pink.*

Top. Bot. 63. Syme, E. B. ii. 45. 191. Nym. 102.

Native. Pascual, Viatical. Sandy fields. Very rare. A. July.

First record, *Sib.* 1794.

7. *Thames.* Sandy fields near Caversham, *Sib.* A drawing from a spec. from Shiplake in Brit. Mus., roadside between Shiplake Station and Holmwood. Native I believe. *Honble. J. L. Warren in Rep. Rec. Club*, 1875.

Berks. Englefield, *Walk. Flora.* Side of wood near Taplow (Bucks?), Early Heath, *Merrett.* Maidenhead, *H. Bos.* Cookham, *Marshall.* Bucks, Warwick, very rare.

[*D. prolifer*, *L.*

Berks 'Windsor *W. A. Lewis in Hb. Bot. Soc., Lond.* Watson.]

MALACHIUM. Fr.

M. aquaticum, *Fr.* *Water Chickweed.*

Stellaria aquatica, *Scop.* *Fluk.* 79. Syme, E. B. ii. 91. 227. Nym. 107.

Native. Paludal. In damp places. Common. July-Oct.

First record, *Sib.* 1794. Localised.

2. *Onse.* *Mix.*

3. *Swara.* *Maltese.* *Hard.* *A. Fr.*

Near *H. Bos.* *Almuth.* *reservoir,*

and *reaching to 5.*

4. **Ray.** Islip, *H. Bos.* Mag. Coll. Walks, *H. E. Garnsey.* Wood Eaton, Marston, Otmoor abundant, Kirtlington.
 5. **Isis.** Port Meadow, Godstow, Handborough, Bruern, Eynsham, etc. Very large in Christ Church Meadow, 1885.
 6. **Thame.** Oxford, *Hb. Lawson.* Ifley, *H. Bos.* Thame, *Hb. Bx.* Dorchester, Littlemore.
 7. **Thames.** Common about Caversham and Shiplake, *F. A. Lees.*
- Berks.** Radley.

CERASTIUM. L.

C. arvense, L. *Field Chickweed.*

Top. Bot. 82. Syme, E. B. ii. 89. 225. Baxt. 286. Nym. 109.

Native. Glareal. Sandy fields; local. P. May-July.

First record, *Sib.* 1794.

1. **Stour.** Tadmarton Heath, and a form approaching *C. Andrewsii*, *A. Fr.*
3. **Swere.** Pesthouse field, Bretch, rare, *T. Bess.* Neithrop, *A. Fr.* Broughton fulling Mill, *T. Bess.*
4. **Ray.** Between the Parks and Wolvercote, *Sib.* Between Elsfield and Noke, at the back of Red Lion Inn, Stow Wood, *Bx. in Walker Fl.* Commons and waste land near Oxford, *Bree.* N. E. corner of Parks, *Bx. in Purton.* On outside of Headington Wick Copse, *H. Ridley.* Near Kirtlington Station, near Tackley, Middleton Stoney.
5. **Isis.** Stanton Harcourt, between Witney and Burford! *Sib.* Between Witney and Minster Lovell! *Bx.* Minster Quarries, Lyneham Barrow, Brize Norton.
6. **Thame.** Road crossing the 100 acres, Bullingdon, *Walk.*
7. **Thames.** Caversham, *Newb.!* Watlington, Pyrton Common, Goring.

Berks. Wallingford, Milton, Tubney, *Bos.* Frilford, Sunningwell, *Dyer.* Unwell Downs.

C. vulgatum, L. (Fr.).

C. triviale, Lk. Top. Bot. 80. Syme, E. B. ii. 85. 222. Nym. 108.

Native. Pratal. Walls, fields, etc. Common and generally distributed. B. or P. April-September.

First record, *Sib.* 1794.

On old walls in Oxford and in Christ Church Meadows and the Parks.

C. viscosum, L. *Mouse-ear Chickweed.*

C. glomeratum, Th. Top. Bot. 79. Syme, E. B. ii. 82. 221. Nym. 108.

Native. Agrestal. Walls, waste places, fields, etc. Common and generally distributed. A. April-September.

First record, *Sib.* 1794.

Var. *C. apetalum, Dum.*

1. **Stour.** Tadmarton Heath.

4. **Ray.** Border of Stow Wood. A very viscous form is also found here.

7. **Thames.** Binfield Heath, Watlington.

A form with very broad leaves and compact flower-heads is not unfrequent. It was abundant on waste ground near Osney in 1884.

C. semidecandum, L.

Top. Bot. 80. Syme, E. B. ii. 81. 220. Nym. 110.

Native. Glareal. Walls, heaths, dry fields. Local. A. April-June. First record, *Sib.* 1794.

1. **Stour.** Tadmarton Heath.

3. **Swere.** Bretch, *A. Fr.* On wall round Rectory close, Broughton, *T. Bees.*

4. **Ray.** Betn. Elsfield and Noke, in great plenty in a lane at the back of the Red Lion Inn, Stow Wood, 1830, *Bz. MSS.* Plentiful in fields above Headington Wick Copse; near Bayswater.

5. **Isis.** Finstock Heath.

6. **Thame.** Shotover, S. side.

7. **Thames.** Binfield Heath, Goring.

Berks. Boar's Hill, Tubney; Northants, Cosgrove, etc., Gloster, Bucks, Warwick.

[*C. pumilum, Curt.* Gloucester, E. and W. Should be searched for on the extreme west side of the county.]

MOENCHIA. Ehrh.

M. quaternella, Ehrh.

M. erecta, Ehrh. Cerastium quaternellum, F. Syme, E. B. ii. 77. 217.

Top. Bot. 68. Baxt. 460. Nym. 111.

Native. Ericetal, glareal. Heaths. Local and rare. A. May.

First record, *Blackstone, MSS.* 1737. *Alsine tetrapetalos Caryophylloides quibusdam Holosteum minimum, Raii.* Very common in the moist parts of Wychwood Forest.

5. **Isis.** Wychwood, as above, South Leigh Heath, Eynsham Heath, *Sagina erecta, Sib.* Ramsden Heath, *J. Westcombe.*

6. **Thame.** Shotover Hill, *Sib.*

I have made careful and repeated search on the large commons on the Chalk Downs, and also the foregoing localities for this plant, but as yet without success.

Berks. Ascot Race Course, *J. G. Baker.*

STELLARIA. L.

S. media, Cyr. *Chickweed.*

Top. Bot. 78. Syme, E. B. ii. 93. 229. Nym. 111.

Native. Agrestal. Common everywhere. A. Flowers all the year.

First record, *Sib.* 1794.

Var. *S. neglecta*, Whe. Reich. Fl. Germ. 4905.

3. Swere. Near Clattercut.

4. Ray. Kirtlington.

5. Isis. Port Meadow, see *Report of Record Club*, 1883.

6. Thame. Shotover Plantation, Albury.

Var. *Borœana*, Jord.

1. Stour. Tadmarton Heath.

2. Ouse. Hethe.

3. Swere. Bloxham, Shutford.

4. Ray. Noke, Upper Heyford.

5. Isis. Stonesfield, Wolvercote.

6. Thame. Iffley.

7. Thames. Maple Durham, etc.

Berks. S. Hinksey.

The typical plant is one of our most ubiquitous species, flourishing as a garden weed in the centre of the city.

[Var. *umbrosa*, Opitz. In Warwick, near Honington. This should be found in the county; woods in the north-west of the county should be especially searched.]

S. Holostea, L. Greater Stitchwort. All-bones.

Top. Bot. 78. Syme, E. B. ii. 96. 230. Nym. III.

Native. Septal. Hedges and wood borders. Generally distributed, abundant on the chalk. P. April-June.

First record, *Blackstone MSS.* 1737. *Caryoph. Holosteus ar. flore majore* C. B. Pin. 'In the fallow fields about Walcot and by the roadside between Charlbury and Ditchley.' Beesley says it is rare about Banbury.

S. palustris, Ehrh.

S. glauca, With. Top. Bot. 78. Syme, E. B. ii. 97. 231. Nym. III.

Native. Paludal. Marshy meadows. Local. P. May-July.

First record, *Caryoph. Holosteus arvensis medius* . . . invenit, D. Sherard prope Oxoniam, and first in Britain: ante 1724.

3. Swere. Broughton, T. Bees. Single spec.

4. Ray. Otmoor! *Sib.*, *Stellaria media*. Ambrosden! near Kidlington, H. Bos. Oddington! 1881, Bz. Betn. Oddington and Studley abundant, field opposite Mesopotamia; Marston.

5. Isis. About Oxford, *Sherard in Ray*. Godstow! typical, *Newb.* Binsey! H. Bos. Port Meadow! betn. Heyfield's Hut and Port Meadow! 1824, Bz. Near Eynsham, Wolvercote, Bruern.

6. Thame. Betn. St. Clement's and Iffley, Bz. in Walk. River bank below Iffley, H. Bos. Ch. Ch. Meadow ditch, 1824, Bz. Marsh Baldon, H. E. Garnsey.

7. Thames. Nettlebed, *A. Fr.* Meadows, North Stoke.

Berks. Devil's Back Bone, 1827; betn. Wytham and Binsey! 1831, *Bz.*
Kintbury, *Reeks.* Bisham, Medmenham, Cookham, Britten. In
all the bordering counties, including Gloucester, near Oddington.

***S. graminea*, (L) Retz. Heath Stitchwort.**

Top. Bot. 79. Syme, E. B. ii. 98. 232. Nym. 112.

Native. Pascual. Pastures, heaths, sandy or gravelly soil. Widely
distributed and locally common. P. May–August.

First record, *Sib.* 1794.

1. Stour. Tadmarton Heath, Sibford, etc.

2. Ouse. Mixbury, Hardwick.

3. Swere. Drayton Lane, *Gull.* Common, *Bees.* Broughton, Walford.
Epwell Heath, Clattercut.

4. Ray. Headington Wick Copse, 1831, *Bz.*! Upper Heyford, *Bz.*

5. Isis. Church Handborough, 1833, *Bz.*! Begbroke, *H. Bos.* North
Leigh, Bruern, Finstock.

6. Thame. Shotover, near Iffley, *Bz.* Open Magdalen, Bullingdon.

7. Thames. Nettlebed, Binfield, nr. Cane End.

Berks. Boar's Hill, Frilford.

It is frequently barren owing to the stamens being destroyed by a
fungus.

***S. uliginosa*, Murr. Bog Stitchwort.**

Top. Bot. 79. Syme, E. B. ii. 99. 233. Nym. 112.

Native. Paludal. Wet places. Local. P. May–August.

First record, *Sib.* 1794.

3. Swere. Watery places frequent, *Bees.* Hanwell, Bretch, Lovell's
Lynches, Hook Norton, *A. Fr.* North Newington, *T. Brayne.*

4. Ray. Somerton, Lower Heyford, Kirtlington.

5. Isis. South Leigh, *Sib.* Begbroke, *H. Bos.* Wychwood, Bruern.

6. Thame. Shotover Hill, *Sib.* Thame, *Hb. Bz.* Betn. Shotover and
Horspath, *H. E. Garnsey!* Albury, Wheatley.

7. Thames. Ibstone Common, Binfield Heath. Abundant in wood
above Homer Farm, Chinnor.

Berks. Bagley Wood, betn. South Hinksey and Childswell Farm, 1831,
Bz.! Wytham, Eng Wood, Frilford.

A tufted form occurred on mud at Lower Heyford.

ARENARIA. L.

***A. serpyllifolia*, L. Thyme leaved Sandwort.**

Top. Bot. 76. Syme, E. B. ii. 102. 235. Nym. 115.

Native. Agrestal and glareal. Walls and cornfields. Common and
generally distributed. A. June–October.

First record, *Sib.* 1794.

The segregate *A. sphaerocarpa*, Ten. is the plant which usually occurs; the variety *A. leptoclados*, Guss. is not unfrequent.

1. Stour. Tadmarton.

3. Swere. Adderbury, *A. Fr.* Broughton, *Miss Rousher.* Drayton.

4. Ray. Beckley, *Rev. Moyle Rogers.* Elsfeld, etc.

5. Isis. North Leigh.

6. Thame. Thame, *Hb. Fr.* Dorchester, Drayton.

7. Thames. Goring, Caversham, *Newb.* Maple Durham.

Berks. Hinksey, Marcham; Northants, Warwick, Bucks, Gloster E.

A. trinervia, L.

Melbringia trinervia, Clairv. Top. Bot. 77. Syme, E. B. ii. 101. 234. Nym. 112.

Native. Moist woods, shady places. Not uncommon. A. May, June. Is noted for all the districts except the Stour.

It is plentiful in suitable localities round Oxford.

ALSINE. L.

A. tenuifolia, Wahl.

Top. Bot. 76. Syme, E. B. ii. 112. 243. Nym. 117.

Native. Glareal. Dry stony ground, chalky cornfields. Local and rare. A. May-July.

First record, *Blackstone MSS.* 1737.

1. Stour. Tadmarton Heath, *T. Bees.*

3. Swere. Bretch, very rare, *Gulliver.* Not found in 1842, *Bees.* Found in 1864, *A. Fr.* Railside betn. King's Sutton and Banbury, *W. Patey.*

5. Isis. In Cornbury Quarries, but very rarely, *Blackstone.* Rewley Abbey, Charlbury Stone Quarries, *Sib.* Minster Lovell! *A. Robertson, M.A.* Stonesfield.

6. Thame. Cheney Lane, on a bank after crossing a stream of water between the Asylum and the Windmill. With *Trifolium scabrum* very rare, *Bz. MSS.* 1832, also in *Walk.* Under the shade of a hedge-bank near Shotover and Wheatley, *Phyt. n. s. 4.* 101. Spec. in *Hb. Br. Mus. Col. H. Boswell.* Shotover, 1849, *T. Westcombe, H. Bos.* 1859, 1866. Headington, *R. Walker.*

7. Thames. Cornfields near Nettlebed, *Sib.* Beta. Nuffield and Mongewell, Watlington.

Berks. Streatley, *Watson.* Moulshford.

Bucks, Northants, rare. Gloster, Warwick, casual only.

SAGINA. L.

S. nodosa, (L.) Fsl.

Top. Bot. 72. Syme, E. B. ii. 118. 246. Nym. 120.

Native. Ericetal. Damp heaths, wet gravelly places. Local and rare.

P. July, Aug.

First record, *Blackstone MSS.* 1737. In several springs of Wychwood Forest. *Alsine palustris fol. tenuissimis*, Park.

4. Ray. Near Stow Wood, *Sib.* *Spergula nodosa*; roadside between Oddington and Otmoor, *Bz.* 1831. Near Bicester, coll. Mr. Young, *Hb. Bz.*

5. Isis. Wychwood and Cornbury, *Blackstone*. Binsey, *H. Bos.*! Port Meadow, *Hb. Lawson*. Near Chipping Norton, *T. Bees*. North Leigh Heath, Canal-side towards Wolvercote.

6. Thame. Shotover Hill, *Sib.*! Bogs under Bullingdon Green, 1831, *Bz.*

Berks. Between South Hinksey and Bagley Wood, *Bz.* 1831. Wootton Heath, *H. Bos.*! Foxcombe Hill, *H. E. Garnsey*. Cookham, Kintbury.

Given without locality in Walker's Flora. It is one of our most local plants. Bucks, rare. Northants, extinct. Gloster queried. Warwick, Sutton Park, Coleshill Heath.

[*S. subulata*, *Pr.*

Berks. Bagshot Heath, *Watson*. Bray, *N. B. G.* Newbury, Newtown, *Newb.* Queried for Bucks. It is possibly extinct in Northants.]

S. ciliata*, *Fr.

Syme, E. B. ii. 119. 247. Nym. 121.

Native. Ericetal. Dry sandy fields. Very local. A. June-Aug.

First record, *the Author*, 1884.

1. Stour. Tadmarton Heath.

7. Thames. In a Common above Chinnor.

Bucks. Bledlow, *Rep. of Rec. Club*, 1883, Berks, Northants local, Warwick, Gloster E.

The mucronate points to the outer sepals which are adpressed to the mature fruit (not as in *apetala* spreading to form a Maltese cross), and the yellower green foliage offer the chief distinguishing features to separate it from *apetala*, which is more hairy than *ciliata*.

S. apetala*, *L.

Top. Bot. 70. Syme, E. B. ii. 125. 251. Nym. 121.

Native. Glareal. Walls and sandy ground, not uncommon. A. May-Aug.

First record, *Plot 1677*, and first as British, *Saxifraga ang. alsinæfolia annua*.

1. Stour. Tadmarton Heath, *A. Fr.*, vera.

3. Swere. Bodicote, Adderbury, *T. Bees*. Broughton.

4. Ray. Fallow fields of Headington, Balliol Col. Garden Walk, *Plot. Mag.* Walks, and in the walks of the Physic Garden, *Sib.* Grassplot

- opposite Garden Library, *Hb. Dillen*. Beckley, *Moyle Rogers*.
 Elsfield, *see Rep. of Rec. Club*, 1880. Marston, Middleton Stoney.
 5. *Isis*. Godstow, *Newb.* Blenheim Park, *H. Bos.* Woodstock, Bampton,
 Clanfield.
 6. *Thame*. Cowley, *Plot.* Thame, *Hb. Bz.* Cuddesdon, Horsepath,
 Great Haseley.
 7. *Thames*. Caversham, rare, *F. A. Lees*.

At least two forms occur, one erect and nearly simple in habit, the other prostrate and very branched; the last occurs on dry ground; the former at the base of walls, etc.

Berks. Buckland, *H. Bos.* Marcham.

S. procumbens, *L.* *Pearlwort.*

Top. Bot. 71. Syme, E. B. ii. 248. Baxt. 199. Nym. 121.

Native. Viatical. Moist places, heaths, etc. Common and generally distributed. P. April-Sept.

First record, *Hb. Dillenius*, Oxford, 1744.

SPERGULA. *L.*

S. arvensis, *L.* *Corn Spurrey.*

Top. Bot. 73. Baxt. 338. Nym. 121.

Native. Agrestal. Sandy cornfields. Local. A. June-Aug.

First record, *Sib.* 1794.

1. *Stour*. Tadmorton Heath.

3. *Swere*. Adderbury, *Gull.* Rare, *Bees*. Broughton, *R. Fr.* Tadmorton,
 between North Newington and Wroxton.

4. *Ray*. Headington Wick, *Bz. MSS.* Elsfield, *H. Bos.* Stow Wood.

5. *Isis*. Bruern.

6. *Thame*. Headington above Bartholomew's Hospital, *Sib.* Thame,
Hb. Bz. Shotover, between the Asylum and Bullingdon, *Bz.*
 Cuddesdon.

7. *Thames*. Cane End, Goring, Ipsden, Binfield, Crowsley, Whit-
 church.

Berks. Wootton, *H. Bos.* Boar's Hill, Frilford, etc.

Var. sativa, Boen. with non papillose seed. Syme, E. B. ii. 127. 252.

4. *Ray*. Elsfield.

Var. vulgaris, Boen. Syme, E. B. ii. 127. 253.

The common form.

SPERGULARIA. *Pr.*

S. rubra, *Pr.*

Top. Bot. 76. Syme, E. B. ii. 254. Nym.

Native. Glareal. Sandy heaths and fields. Local. A. June-Sept.

First record, *Sib.* 1794.

1. *Stour*. Tadmorton Heath.

3. *Swere*. Milcombe Lane, *T. Bees*.

4. Ray. Elsfield.
 6. Thame. Shotover, in a furze close where sand has been dug, *Sib.*
Rarity about Oxford, *M. T. Masters.*
 7. Thames. Nettlebed, *A. Fr.*!
- Berks.** Bagley, *Bz.* Wootton, *H. Bos.* Boar's Hill, Frilford, Abingdon.

ORD. XIII. LINEÆ, DC.

LINUM. L.

**L. usitatissimum, L.* *Flax.*

Casual. Comp. Cyb. Br. 493. Syme, E. B. ii. 194. 292. Bx. 353.
Nym. 125.

First record, *Gulliver*, 1821.

3. Swere. Hook Norton, *Gull.* Do. *Beesley*, rare. Banbury, *A. Fr.*
4. Ray. Elsfield, *Hb. R. Linton.* A considerable quantity of Flax was raised at Water Eaton, Hampton, etc., on boggy land and good wheat got after it, *Agric. Rep.* 204.
5. Isis. G. W. Station, waste ground.
6. Thame. Shotover, *Hb. Lawson.* Ifley, at the Mill, *H. Bos.* Headington.

Not even naturalized.

[*L. perenne, L.* Northants very rare, if not extinct.]

[*L. angustifolium, L.* Warwick, casual. Berks (?), Gloster (?).]

L. catharticum, L. *Purging Flax.*

Top. Bot. 83. Syme, E. B. ii. 181. 289. Nym. 126.

Native. Pascual. Dry pastures, heaths. Not uncommon. A. June-Oct.

First record, *Sib.* 1794.

1. Stour. Tadmorton Heath, Sibford Common.
2. Ouse. Mixbury.
3. Swere. Andrew's pit, Bretch, Bodicote Mill. Beyond Neithrop, *Gull.* Crouch Lane, *Bees.* Tadmorton, *F. Fr.* Somerton.
4. Ray. Cross roads between Middleton Stoney and Bicester, *A. Fr.* Studley, *Hb. Lawson.* Oddington, *Rev. Moyle Rogers.* Stow Wood.
5. Isis. Wychwood, North Leigh, Stonesfield, Bladon, Ditchley.
6. Thame. Waterperry, *A. Fr.* Bullingdon, *H. Bos.* Shotover, Wheatley, Holton, Clifton Hampden.
7. Thames. Stokenchurch, *Hb. Bz.* Woodcote Heath, Binfield Heath, Beacon Hill, Pyrton, Ibstone, Ipsden, etc.

Berks. Streatley, Boar's Hill, Frilford, etc.

RADIOLA. Rth.

R. linoides, Rth. *All-Seed. Least Rupture Wort.*

R. Millegrana, L. Syme, E. B. ii. 179. 288. Baxt. 188. Nym. 126.

Native. Ericetal. Damp heaths. Very rare. A. June-Aug.

First record, *the Author*, see *Report of Record Club*, 1881, p. 186.

7. Thames. Binfield Heath in damp paths, and by a small pond side with *Centunculus*.

Berks. Early Heath. Warwick, very local.

ORD. XIV. MALVACEÆ, Br.

ALTHEA. L.

** *Althæa officinalis*, L. Marsh Mallow. Syme, E. B. ii. 163. 278.

Casual. In a ditch in Long Meadow [betn. Oxford and Iffley], *Mr. Jos. East*, 1835.

A solitary plant on the margin of a watery ditch a little above the Island in Ch. Ch. Walk. In the same place 1845, Sep. 7th, and this plant is much increased in size. Do. July, 1849, *W. Bz.* Extinct, *Phyt. N. S.* v. 2. 113.

** *Lavatera arborea*, L. Tree Mallow. Syme, E. B. ii. 165. 279.

Casual. Waste ground, Grimsbury Wharf, *E. French*.

MALVA. L.

M. moschata, L. Musk Mallow.

Top. Bot. 85. Syme, E. B. ii. 166. 280. Baxt. 25. Nym. 129.

Native. Septal. Borders of fields, waysides. Local. P. June-August.

First record, *Sib.* 1794.

2. Ouse. Mixbury and Finmere, *R. Pryor in Walk.*

3. Swere. Andrew's pits, *Gull.* Frequent by borders of fields, *Bees.* Draper's Road, rare. Roadside Gt. Tew, *A. Fr.* Twyford bridge, *S. Brayne.* Nr. Shutford.

4. Ray. Headington, *Mrs. L. Walker.* Between Rousham and Tackley, *Miss Armetriding.* Grave Hill Wood, *Mrs. G. Woodward in Bz.* White flowers, Suscot Wood, *W. Wootton Wootton, Esq.*

5. Isis. South Leigh, betn. Witney and Burford, *Sib.* Wychwood, *Hb. B. Linton.* Roadside betn. Leather Bottle and Ashford Mills, 1831. Betn. Church and Long Handborough, *Mr. Tesc.* 1833. Betn. Woodstock and Stonesfield, betn. Stonesfield and Ashford Mill, 1831! betn. Church Handborough and Eynsham, Wootton Wood borders, nr. Alvescott, *Mr. Barrett, Bz. Pl.* Dean near Chipping Norton, *T. Bees.* Stonesfield, Witney, South Leigh, Bladon, Charlbury.

6. Thame. Culham Heath, *Sib.* S.E. corner of Cowley Marsh, *Bz. in Walk.* Shotover, *Hb. Lawson.* Nuneham, *H. Bos.* Wheatley.

7. Thames. Stokenchurch, *Hb. Bz.* Henley, *H. Bos.* Nr. Crowley

Park, betn. Goring and Woodcote, Gallow's Tree Common, betn. Christmas Common and Assenton, Mongewell, Upper Greenfield.

Berks. Bagley, Cumnor Hurst, *Bz.*

With white flowers nr. Woodcote and near Stonesfield.

M. sylvestris, L. Common Mallow, 'Cheeses.'

Top. Bot. 85. Syme, E. B. ii. 167. 283. Nym. 129.

Native. Viatical. Waysides. Common and generally distributed. P.

June-Sept.

First record, *Sib.* 1794.

It has been noticed with white flowers at Handborough, and light blue (similar to chicory) near Woodcote. The leaves are often attacked with *Puccinia malvacearum*.

M. rotundifolia, L. Dwarf Mallow.

Top. Bot. 86. Syme, E. B. ii. 168. 282. Nym. 130.

Native. Viatical. Waste places and roadsides. P. May-August.

First record, *Sib.* 1794.

Generally distributed. Common about Oxford.

** *M. nicæensis, All.* Cyb. Comp. 493.

Casual. Oxford, 1872, *Col. Rev. H. E. Fox, Hb. Br. Mus.*

ORD. XV. TILIACEÆ, *Juss.*

TILIA. L.

* **T. platyphyllos, Scp.** Large leaved Lime.

T. grandifolia, Ehrh. Syme, E. B. ii. 172. 285.

Alien (?). Woods, plantations. Rare. T. June.

First record, *Tilia foliis molliter hirsutis, viminalibus rubris fructu tetragono*. 'Tis known by the name of the Red Lime, and grows naturally in Stokenchurch Woods, *D. Bobart*, 1690. *T. europæa* var. *b.* *Sib.* as above also in *Ray Edit.* ii. and iii. in *Smith's Fl. Br.*, in *Gough's Camden*, apparently planted, *Mr. Bicheno*, only one tree seen in 1824, not there now, *Prof. Williams, Sm. Eng. Fl.*, Do. in *Walk. Fl.*, *Hb. Br. Mus.* *T. corallina* coll. *J. E. Bicheno*. Stokenchurch Woods were till lately said to have produced both the broad leaved species, *Phyt.* i. 170. Planted in Banbury Cemetery, *A. Fr.* and at Thame, etc.

* **T. vulgaris, Hay.** Lime.

T. intermedia, D C. *T. europæa, L.* Nym. 131. Syme, E. B. ii. 173. 286. *Bz.* 293.

Alien. Always as a planted tree in the county, some fine specimens in Cornbury Park.

T. ulmifolia, Scop. Small leaved Lime.

T. parvifolia, Ehrh. Syme, E. B. ii. 178. 287. Nym. 131.

Native or denizen. Woods. T. Local and rare. July, August.

First record, *J. E. Bicheno*, 1824.

7. **Thames.** Stokenchurch Woods plentifully, *J. E. Bicheno*, in *Sm. Eng. Fl.* A single and rather large tree of above, *W. Christy*, *Jun.* 1834, in Stokenchurch Woods.

Occurs as a planted tree in scattered localities throughout the county.

It is wild in Northants (Bedford purlieus) and Gloster.

ORD. XVI. HYPERICINEÆ, DC.

HYPERICUM. L.

H. Androsæmum, L. Tutsan.

Androsæmum officinale, All. Top. Bot. 88. Syme, E. B. ii. 143. 264. Bx. 39. Nym. 131.

Native. Sylvestral and septal. Woods and hedges. Local and rare.

P. June-August.

First record, *Sib.* 1794.

4. **Ray.** Above Upper Heyford, rare, *Rev. E. Fox*. Wood Eaton, *Hb. R. Linton*.

6. **Thames.** Shotover Plantations, *Sib.* In a ditch on the top of Shotover, a little before you come to the gate leading to Mr. Schutz's, *Bx. in Walk.* Thicket on Shotover, *H. Bos. in Phyt. n. s. 4.* 100. Do. near the pond, *H. Bos.* 1859. North side of Shotover Hill, and in lane leading from bottom of the hill to Horspath, and by the side of a ditch near the old fish ponds, *Bx.* 1824-1831. See *Bart. Br. Pl.* in his MSS. the *South* not the *North* side is given.

7. **Thames.** Stokenchurch, Nettlebed Woods, *Sib.* About Henley in beech woods, 1831, *Bx.*, *Hb. Br. Mus.*, *J. B. Benson*. Highmoor, 1862, Maple Durham, *H. Bos.* Woods above Dashwood Hill, just in Oxon.

Berks. Streatley, *H. Bos.* Cookham, Islley, Tidmarsh, and scattered through the bordering counties.

* **H. calycinum**, L. Rose of Sharon.

Comp. Cyb. 494. Syme, E. B. ii. 146. 267. Nym. 131.

Alien. Hedges and shrubberies. P. July-October.

First record, *T. Beesley*, 1841.

3. **Swere.** Coppice on South of Shutford Lane, but hardly wild, *Bees.* Hook Norton, *Miss Hyde*.

5. **Isis.** Blenheim planted, *F. Rogers*.

6. **Thame.** Thickets at Nuneham, *H. Bos. Phyt. 4 n. s.* 101. Escaped from the not distant garden.

7. Thames. Near Whitchurch, established, *Newb.* Goring, *Hb. Lawson.*

Berks. Buckland, introduced, *H. Bos.* Sulham Woods, *F. Tufnail.* Ilsey, Hampstead Wood, *Compt.* Tidmarsh, *Newb.*

H. montanum, L.

Top. Bot. 92. Syme, E. B. ii. 178. 275. Nym. 132.

Native. Sylvestral. Woods, on the chalk. Local. P. July-Sept.

First record, *Sib.* 1794.

7. Thames. Stokenchurch, Henley, Maple Durham, *Sib.* Wood nr. Whitchurch, *Phyt.* 5. 155. Caversham, *Hb. Br. Mus.* col. J. Carroll, 1849. Henley Park Hill, 1857, *H. Bos.* Betn. Caversham and Maple Durham, *F. A. Lees.* Lower Assenton, *Bolton King.* Kidmore End, *F. Tufnail.* Sunley Wood, Penley Wood, Mongewell, Nuffield, betn. Nettlebed and English Farm, Woods near Stoke Row, Springwell Wood.

Berks. Bagley, *H. Bos.* 1857. Bisham, Wargrave, *Britten.* Blewberry, *Newb.*

Does not occur in Warwick or Northants.

H. hirsutum, L. Hairy St. John's Wort.

Top. Bot. 91. Syme, E. B. ii. 158. 274. Nym. 133.

Native. Sylvestral. Woods and Coppices. Rather common. P. July-Sept.

First record, *Sib.* 1794.

2. Ouse. Ardley Wood.

3. Swere. Drayton, *Gull.* Hanwell, not common, *Bees.* Common about Hook Norton, *A. Fr.* N. Newington, Broughton, *T. Bees.*

4. Ray. Stow Wood, *Sib.* Near Middleton Park, *A. Fr.* Headington Wick, *H. Bos.* Kirtlington, Tackley, Middleton Stoney.

5. Isis. Tar Wood, *Sib.* Copse near Ashford Mill, Woods about Church Handborough, *Bz.* Chipping Norton, Burford, *A. Fr.* Wychwood, *H. Bos.* North Leigh, Charlbury, Blenheim, Bruern, Stonesfield, most abundant in Wychwood.

6. Thame. Between Bullingdon Green and Shotover, *Bz.* Near Thame, replacing *pulchrum*, *A. Fr.* Nuneham, *H. Bos.* Cowley, Wheatley, Dorchester.

7. Thames. Goring, *Hb. Bz.* Stokenchurch, Nuffield, Sunley Wood, Chinnor, etc., common.

Berks. Wytham, *H. Bos.* Bagley, Boar's Hill, Marcham. More common on the Chalk, Oolite, and Clay, than on Sandy soil.

H. pulchrum, L.

Top. Bot. 90. Syme, E. B. ii. 187. 273. Nym. 133.

Native. Ericetal. Heathy places. Local, not common. P. June-August.

First record, *Sib.* 1794.

1. **Stour.** Tadmarton.

2. **Ouse.** Finmere, *R. Pryor.* Hardwick Heath.

3. **Swere.** Hanwell Heath, Epwell Heath, *T. Bees.* 1

4. **Ray.** Headington Wick Copse, 1831, *Hb. Bz.* Near Islip, *H. Bos.* Beckley.

5. **Isis.** South Leigh Heath, *Sib.* Wychwood, *H. Bos.* Southcombe, *T. Bees.* North Leigh Common, Bruern, Finstock Heath.

6. **Thame.** Bullingdon! *H. Bos.* Culham, Nuneham, Railside Wheatley, Shotover, South side.

7. **Thames.** Nettlebed, *A. Fr.* Stokenchurch, *Hb. Bz.* Henley, Caversham, *H. Bos.* Penley Wood, Woodcote, Chinnor, Checkendon, Mongewell, Crowsley, Withy Coppice, Binfield Heath, Ibstone, Whitchurch, Cane End, Springwell Wood, Ipsden Wood.

Berks. Early Common, *F. Tufnail.* Boar's Hill.

H. tetrapterum, Fries.

H. quadrangulare, L. Top. Bot. 88. Syme, E. B. ii. 152. 270. Nym.

133.

Native. Inundatal. Marshes, brooksides. Not uncommon. P. July-September.

First record, *J. J. Dillenius*, about 1730.

1. **Stour.** Sibford.

2. **Ouse.** Mixbury.

3. **Swere.** Hanwell, *Gull.* Grimbury, *J. French.* Somerton, Cropredy.

4. **Ray.** Replacing *pulchrum*, between Thame and Bicester, *A. Fr.* Headington Wick Copse, *Hb. Bz.*, 1831. Islip, *H. Bos.* Water Eaton, Oddington, Marston, Heyford, Kirtlington, near Bicester.

5. **Isis.** Wolvercote, *Hb. B. Linton.* Freeland, Bruern, Charlbury, Witney.

6. **Thame.** Shotover, *Herb. Dillenius.* Thame, Bullingdon Green, Shotover Hill, *Bz.* Dorchester, Wheatley, etc.

7. **Thames.** Mongewell.

Berks. Pusey, *H. Bos.* Wytham, Frilford.

A hybrid between this and *perfoliatum* was found near Brackley by Rev. H. Friend, it may be *H. intermedium*, Retz.

H. quadrangulum, L.

H. dubium, Leers. Top. Bot. 89. Syme, E. B. ii. 151. 269. Nym.

133.

Native. Septal. Hedges, shady places. Local. P. July, Aug.

First record, *Gulliver*, 1841.

1. **Stour.** Near Tadmarton.

2. **Ouse.** Shelswell.

3. **Swere.** Near Adderbury, near Wroxton Mill, *Gull.* Oxford Road, Andrew's pit, Shutford Lane, it is not very unfrequent here, *T. Beesley.* Twyford Lane, *A. Fr.* Cropredy.

Var. H. maculatum, Cr.

3. **Swere.** Claydon Hill, *T. Bees.*

Berks. Childswell Farm, *Hb. Dill.* Wytham; Northants (Coppice Moor); Gloster; Warwick.

H. perforatum, *L.* St. John's Wood.

Top. Bot. 88. Syme, E. B. ii. 148. 268. Nym. 133.

Native. Septal. Woods, hedges. Common and generally distributed.

P. July–Sept.

First record, *Sib.* 1794.

Var. H. angustifolium, Bab. *H. microphyllum*, Jord.

3. **Swere.** Somerton cutting.

7. **Thames.** The common form on the lower Chalk as at Crowell, Nuffield, Ipsden, Grimadyke, etc., and also in Berks. See *Rep. of Rec. Club*, 1881.

H. lineolatum, Jord. also occurs; it is scarcely distinguishable from the type.

H. humifusum, *L.* Creeping St. John's Wort.

Top. Bot. 90. Syme, E. B. ii. 155. 271. Nym. 134.

Native. Pascual. Heaths, pastures on gravelly soil. Local, rather rare. **P.** June, July.

First record, *Sib.* 1794.

1. **Stour.** Tadmarton Heath, *A. Fr.*!

2. **Ouse.** Finnere, *R. C. Pryor.*

3. **Swere.** Wroxton Heath, *Gull.* Epwell Heath.

4. **Ray.** Headington Wick, *H. Bos.* Beckley.

5. **Isis.** South Leigh, *Sib.* North Leigh Common, Finstock Heath, Bruern Wood.

6. **Thame.** Bullingdon Green, *Sib.* Roadside between Shotover Hill and Cuddesdon! *Walk. Fl.* Nuneham Wood, *J. French.* Clifton Heath. Top of Shotover, *H. Bos.*

7. **Thames.** Henley, *H. Bos.* Ibstone Common, Binfield Heath, Chause Heath.

Berks. Powder Hill Copse! Bagley! *H. Bos.* Frilford.

[**H. elodes**, *Huds.* Marsh St. John's Wort.

Elodes palustris, Nym. Syme, E. B. ii. 159, 286. **P.**

4. **Ray.** Headington Wick Copse, *Rev. E. Fox*, 1857. Not there now.

Berks. Moors about Reading, Windsor Gt. Park, *Brit.* Bagley, *Rev.*
E. Fox. Bulmersh Park, *F. Tufnail.* Bagsshot Heath, *Dill. Ray.*
 Crookham Common, *Hb. Stubbs.* Sunninghill, *Hb. Br. Mus.*
Watson. Snelsmore Common, *Newb.*
 Bucks, Warwick, Coleshill Pool.

ORD. XVII. ACERINEÆ, DC.

ACER, L.

* **A. Pseudo Platanus, L.** *Sycamore.*

Alien. Comp. Cyb. 494. Syme, E. B. ii. 230. 320. Nym. 135.

Woods, hedges. Naturalized. T. May, June.

First record, *Plot*, 1677, a variegated Sycamore in Magd. Coll. Grove, afterwards transplanted to the Physic Garden.

The Sycamore occurs in all the districts, and often, as in Shotover Plantations, with *Xylonia acerinum*, *Grev.* and *Erineum acerinum*.

Although originally a planted tree, self-sown specimens may be noticed in various parts of the county.

A. campestre, L. *The Maple.*

Top. Bot. 93. Syme, E. B. ii. 232. 321. Bart. 98. Nym. 135.

Native. Hedges, woods, etc. T. Common and generally distributed.
 May, June.

First record, *Sib.* 1794.

ORD. XVIII. HIPPOCASTANEÆ, DC.

* **Æsculus Hippocastanum, L.** *Horse Chestnut.*

Alien. Frequently planted, self-sown seeds by roadside near Banbury,
A. Fr.

ORD. XIX. GERANIACEÆ, DC.

GERANIUM, L.

G. pratense, L. *Meadow Crane's-bill.*

Top. Bot. 95. Syme, E. B. ii. 195. 297. Bart. 30. Nym. 136.

Native. Pratal. Moist meadows, not unfrequent. P. June-Aug.

First record, *Sib.* 1794.

2. **Ouse.** Mixbury! between Stoke and Hethe Brand, *G. Woodward*
in Bz.

3. **Swere.** Rather common, brookside near Grimsbury, between Little Bourton and Huscot, *Gull.* Mill meadow, not uncommon, *Bees.* Bloxham, *Miss Rusher.* Lower Tadmarton, *Hb. E. Walford.* Deddington, Somerton, Swalecliffe.

4. **Ray.** Marston, *Sib.* Morrell's meadows, Headington Hill, *Walk. Fl.* Field near Parson's Pleasure, *T. Thurland.* Islip, Bicester, Thrupp, *H. Bos.* About Steeple Aston, *Miss Armetriding.* Abundant in meadows near the Cherwell, between Tackley and Northbrook, and also about Upper Heyford, *Bz. MSS.* Cherwell side near Marston, and generally common in the Cherwell Valley.
5. **Isis.** South Leigh, *Sib.* Between the Diamond House and the Woodstock Road, *Bz. in Walk.* Near Bladon, *Mr. E. Forster, Jun., in Bot. Guide.* Wychwood, *Hb. R. Linton.* Wolvercote, Bladon, Garsington, *H. Bos.* Cornbury Park, Handborough, near King's Lock, Burford, Bruern, Tangle, near Ashford Mill, etc.
6. **Thame.** Common about Oxford, *W. T. Dyer.* St. Clement's, *Sib.* Thame, *Hb. Bz.* Albury, Clifton Hampden, Nuneham, Dorchester, Wheatley.

7. **Thames.** Henley, *Jos. Woods.* Caversham, *Phyt. v. 155, Hb. Lawson.* Goring, Little Stoke, Maple Durham.

Berks. S. Hinksey, Cumnor, Bessilsleigh, Appleton, *Bz.* Kennington, *H. E. Garnsey.* Marcham, etc.

With white flowers near Cornbury Park.

[*G. sylvaticum*, *L.* Wood near Middleton, Warwickshire, 1866.]

** *G. striatum*, *L.* Nym. 137.

Alien. Near Bampton, introduced.

* ***G. Phaeum*, *L.***

Alien. *Comp. Cyb. Br.* 495. *Syme, E. B. ii.* 193. 294. Nym. 137. May, June.

5. **Isis.** Near Wilcote, *Bolton King.*

Berks. Remenham Lane, *Hb. Stubbs.* Adbury, *Newb.*

Northants, Aynhoe railside. Warwick.

***G. perenne*, *Huds.* Mountain Crane's-bill.**

G. pyrenaicum, *Burm.* *Top. Bot.* 96. *Syme, E. B. ii.* 196. 298. Nym. 137.

Native. Viatical. Roadsides, etc. Locally common. *P.* June-Sept. First record, *Sib.* 1794.

2. **Ouse.** Mixbury.

3. **Swere.** Saw-pit Draper's Road, Banbury, *A. Fr.* Swerford, *E. A. Walford.*

4. **Ray.** By the Parks, near Holywell Church, *Sib.* Back of St. John's Coll., *Mr. Woodward in Sm. Eng. Fl.* Has been classed as a denizen, though in abundance on the eastern side of Oxford, *Maxwell T. Masters, Phyt. n. s. ii.* 133. Between Oxford and Woodstock, *A. Fr.* Near Elsfield, *Hb. Br. Mus., Rev. W. M. Hind, 1857.* Between Headington and Barton, 1831, *Bz.* Bayswater! *H. Bos.* Marston to Wood Eaton, etc.

5. **Isis.** 'Beyond Heyfields' Hut, *Bz.* 1850. Woodstock, *H. Bos.* Port Meadow.
 6. **Thame.** St. Clement's to Cowley, 1828, Cheney Lane, 1841, Headington, 1831, etc., *Bz.*, do. *in Purton.* Wheatley, Iffley, etc.
 7. **Thames.** Between Caversham and Henley, abundant between Shiplake and Henley! *A. Fr.* Near Sonning.
- Berks.** Hinksey, Cumnor, *H. Bos.* Tubney, Cotham with *pale* pink flowers, Bessilsleigh.

G. columbinum, L.

Top. Bot. 98. Syme, E. B. ii. 201. 302. Nym. 138.

Native. Glareal and agrestal. Fields and dry stony places. Local.
A. June-Oct.

First record, *J. Bobart*, 1680, and first as a British plant. *Geran. columbinum fol. imis longis usque ad pediculum diver.* In agro et pratis Oxon. circum a *Jac. Bobart.* Morison, ii. 475.

1. **Stour.** Tadmarton Heath, *Hb. Br. Mus.*, *A. Fr.*
2. **Swere.** Hooknorton, *A. Fr.*, 1875. Bodicote! south of Aynhoe Station, abundant, *T. Bees.* Shutford.
3. **Bay.** Headington Wick Copse, near path between Tagg's Farm and Forest Hill, *Walk. Fl.* Field about bog near Stow Wood, *R. Walker.* Plentiful between Tackley and Kirtlington in railway cutting.
4. **Isis.** Between Witney and Burford, *Sib.* Charlbury and Enstone, *A. Fr.* Lees Rest, *T. Westcombe.* Handborough, *Bz.* Wychwood, *Hb. Lawson.* Stonesfield, Minster Lovell.
5. **Thame.** Cowley, *Sib.* Cheney Lane, *Bz. in Purton.* Shotover, *Bz.*
6. **Thames.** Henley, *A. Fr.* Caversham, *Newb.!* Goring, Maple Durham, Ipsden, Crowell Hill.

Berks. Jenny Bunting's Parlour, *H. Bos.* Old Eynsham Road, *Bz.* Wytham, *Rev. E. Fox.* Cumnor! Sonning railway, *F. Tufnail.*

References to Oxford will be found in the three editions of *Ray*, in the *Stirpium*, in *Gough's Camden*, *Martyn*, etc.

G. dissectum, L.

Top. Bot. 98. Syme, E. B. ii. 200. 302. Nym. 138. Plot. Tab. 9. f. 4.

Native. Agrestal and septal. Cornfields, hedgebanks, etc. Rather common. B. May-Aug.

First record, *Plot*, 1677, and first as British, *Geranium columbinum max. foliis dissectis.* The Greatest Dove's foot Crane's-bill with dissected leaves. With plate.

1. **Stour.** Tadmarton.
2. **Ouse.** Mixbury, Ardley.
3. **Swere.** Roadsides, Banbury, *Gull.* Hardwick, *R. French.* With white blossoms on towing-path at Bodicote Grange, *T. Bees.* Bloxham.

4. **Ray.** Marston, *Plot*, do. in *Ray's Syn.*, *Gough*, etc. Near Oxford, *Hb. Br. Mus.* *Sir Josh. Banks.* Summertown, *Hb. R. Linton.* Elsfield. In the Parks, *Bx.* 1819, *Purton.* Gibraltar, Thrupp, *H. Bos.* Blackthorn, Bicester.
5. **Isis.** Botley Causey, *Plot.* About Walcot sparingly, *Blackstone*, 1737. Port Meadow, *H. Bos.* Stonesfield, Handborough.
6. **Thame.** Cheney Lane, 1820; *Thame*, *Hb. Bx.*
7. **Thames.** Goring, Mongewell, Watlington, Cane End, Caversham, etc.

Berks. Wootton, Hinksey, Frilford.

Sibthorp quotes *Plot's* plant as var. *b.* of *G. dissectum*, but it fairly represents the type. White-flowered forms are rare.

G. molle*, L. *Dove's foot Crane's-bill.

Top. Bot. 98. Syme, E. B. ii. 177. 299. Nym. 138.

Native. Agrestal. Abundant in cornfields, waysides, etc., throughout the county. A. April-Sept.

First record, *Sib.* 1794, and var. *alba* cornfields between Witney and Burford.

The flowers vary from white to light purple, and the extremes of colour are occasionally seen growing together, a fact showing that soil and situation are not the influencing factors in colour development.

***G. rotundifolium*, L.**

Top. Bot. 97. Syme, E. B. ii. 199. 301. Nym. 138.

Native. Rupestral and glareal. Walls and dry banks. Local. A. May-July.

First record, *Sib.* 1794. Noticed also in *Martyn*, *Gough*, *Purton*, etc.

4. **Ray.** On walls in and about Oxford, *Bot. Guide*, *Mr. T. F. Foster, jun.* Near Oxford, *Hb. Br. Mus. Col. Rev. A. Bloxam.* Stow Wood, *H. Bos.* Stanton St. John, Tackley, Kirtlington.
5. **Isis.** About Stonesfield, *Px. MSS.* 1831. Woodstock, Witney, Handborough, Charlbury.
6. **Thame.** Iffley, *Hb. Br. Mus. Col. W. T. Dyer.* Cheney Lane, *Bx.* Between the Asylum and Shotover, Headington Hill, 1849. With *Dothidia Geranii*, Fr. about Oxford, *Bx. MSS.* Bullingdon, *H. E. Garnsey.* Cowley, Horsepath, Gt. Haseley, Gt. Milton, Littlemore railside abundant.

Berks. South Hinksey, Sunningwell, *H. Bos.* Between Sonning and Twyford, *Melville.* Northants, about Harlestone and Brampton. Not recorded for Bucks or Warwick.

The leafy rosettes of this plant, some 5 or 6 inches across, may be seen in *December.* It has been noticed with white flowers, near Cowley.

G. pusillum, Burm.

Top. Bot. 97. Syme, E. B. ii. 198. 300. Nym. 138.

Native. Agrestal. Sides of fields, cultivated ground. Local. June-Sept.

First record, *Sib.* 1794. *G. parviflorum*, Curtis.

1. **Stour.** Tadmarton Heath, *T. Bees.* 1859.

3. **Swere.** Broughton, *A. Fr.* Bloxham, *E. Walford.* Worton Wood side, *R. French.*

4. **Ray.** Headington Wick, *Sib.* Elsfield, *H. Bos.* Stow Wood.

5. **Isis.** Banks of canal beyond High Bridge, *Sib.* Stonesfield, *T. Beesley.* Wolvercote.

6. **Thame.** Bullington, *H. Bos.* Near Cowley Marsh, *H. E. Garnsey.* Cuddesdon.

7. **Thames.** Watlington, Ewelme, *H. Bos.* Caversham, *Newb.* Binfield.

Berks. S. Hinksey, *Bz.* Sonning railside, *F. Tufnail.* Frilford.

G. lucidum, L.

Top. Bot. 99. Syme, E. B. ii. 202. 304. Nym. 138.

Native. Rupestral and septal. Hedgerows, old walls. Local, not common. *A.* May-Aug.

First record, *Geran. annum rotundifol. montanum saxatile lucidum iter. passim in subgrundiis Oxoniensis.* Morison, 1680.

3. **Swere.** Opposite Bodicote Road, rare, *Bees.* Lane leading from Bodicote to Mr. Williams', *Gull.* Between Bodicote and Adderbury, ditch in cornfield, *Hb. Br. Mus. A. French,* 1875.

4. **Ray.** Heyford, *Rev. E. Fox.* Marston, Wood Eaton, Noke.

6. **Thame.** Cowley, Cheney Lane, *Sib.* Headington, *Hb. Lawson.*

7. **Thames.** Assenton towards Henley.

Berks. Hinksey, *H. Bos.* Hagbourne and Blewberry, *Newb.* Wootton.

G. robertianum, L. *Herb Robert.*

Top. Bot. 100. Syme, E. B. ii. 203. 305. Nym. 138.

Native. Viatical. Hedges, woods, etc. Common and generally distributed. *B.* May-Sept.

First record, *Sib.* 1794.

Rarely with white flowers. A densely hairy form with foliage and stems of dark red colour, and with smaller flowers, very similar to the maritime form, has been seen on the stony *débris* from the slate quarries at Stonesfield [and also on a wall-top at Compton, in Berkshire].

ERODIUM. t Her.

** *E. maritimum, t Her.*

Alien. A weed in Bot. Garden. Quite naturalized.

* *E. moschatum*, *L'Her.* *Musk Stork's-bill.*

Comp. Cyb. Br. 132. Syme, E. B. ii. 208. 308. Nym. 139. Baxt. 362. Casual. Waste places. Very rare. A. or B. June.

First record, *Dr. Goodenough Bishop of Carlisle*, in *Sm. Fl. Br.* 1800.

6. Thame. Shotover, *Dr. Goodenough* in *Bot. Guide, Smith, Fl. Br., Arnott's Flora*, do. *Dr. Williams, Prof. Bot.* 1831. From some garden probably. Found in and near Oxford occasionally, *E. W., Hb. Lawson, Walker's spec.* I have observed it once or twice about Oxford, but in places where it had no doubt escaped from gardens, *Bx. Br. Pl.*

Northants, casual. Gloster W. native (?). Warwick.

E. cicutarium, *L'Her.* *Stork's-bill.*

Top. Bot. 94. Syme, E. B. ii. 207. 307. Nym. 110.

Native. Glareal. Sandy fields, wall tops, etc. Widely distributed.

A. or B. April-Sept.

First record, *Sib.* 1794.

1. Stour. Tadmarton Heath.
2. Ouse. Hethe.
3. Swere. Near Adderbury, on a wall at Bodicote, N. Newington, Wroxton, *Gull.* Broughton, *Rees.* Limestone fields above Lower Tadmarton, *T. Bees.*
4. Ray. Stow Wood, Headington Wick, Islip, *H. Bos.* Heyford, *Rev. E. Fox.* Water Eaton, Stanton St. John, Middleton Stoney.
5. Isis. Charlbury, Wilcote, Handborough.
6. Thame. Bullington, *H. Bos.* Thame, *Hb. Bx.* Shotover.
7. Thames. Woodcote.

Berks. Boar's Hill, Wootton, Frilford.

Var. *E. pimpinellifolium*, *Sib.* (species). *E. commutatum*, *Jord.* (?).

Native. Sandy fields. Local. A. or B. June-Sept.

First record, *Sib.* 1794, and first as British.

4. Ray. Headington! *Sib.* Stow Wood, Weston-on-the-Green.
5. Isis. Charlbury railside.
6. Thame. Cowley! *Sib.*

OXALIS. L.**O. Acetosella, L.** *Wood Sorrel.*

Top. Bot. 101. Nym. 141. Syme, E. B. ii. 211. 310. Bx. 327.

Native. Sylvestral. Woods, thickets. Widely distributed.

April-Aug.

First record, *Sir Jos. Banks*, 1760.

3. Swere. Wroxton, Hooknorton, *Bees.* Bloxham, *R. French.*
4. Ray. Bletchington, Stow Wood, *H. Bos.* Oxford, *Sir Jos. Banks.* *Noke.*

5. *Isis*. Ditchley, *H. Bos.* Bladon, Wychwood, Handborough, Bruern.

In Wychwood it occurred on a tree trunk about 4 feet from ground.

6. *Thame*. Shotover, *Dr. Williams*!

7. *Thames*. Stokenchurch, *Hb. Bz.* Nettlebed, *A. Fr.* Chinnor, Mongewell, abundant in most of the Chiltern Woods.

Berks. Cumnor, *H. Bos.* Bagley.

** *O. stricta*, *L.* Nym. 141. Syme, *E. B. ii.* 214. 312.

Casual. Old garden wall behind Holywell St., Oxford, *Hb. Lawson*.

Weed in Holywell gardens, *Rev. H. E. Fox*. Weed in Botanic Garden.

IMPATIENS. *L.*

* *I. parviflora*, *DC.*

Comp. Cyb. Br. 496. Casual, Oxford. Syme, *E. B. ii.* 218. 315.

Nym. 141. July–Nov.

Casual. An ineradicable weed in the Botanic Garden, *Lond. Bot. Ex. Club Report*, 1867, *W. T. Dyer*. Cowley Place and Long Meadow, abundant, *H. Bos.* 1862, 1864. Waste ground, St. Clement's, garden weed in Norham Gardens.

ORD. XX. CELASTRINEÆ, Br.

EUONYMUS. *L.*

E. vulgaris, *Scop.* *Spindle-tree.*

E. europæus, *L.* Top. Bot. 101. Syme, *E. B. ii.* 225. 317. Nym. 144. Bx. 123.

Native. Septal. Woods, hedges, etc. Not uncommon. Shrub. May, June.

First record, *Sib.* 1794.

2. *Ouse*. Stoke Lyne, *E. Fry, Esq.* Tusmore, eight miles on the Bicester Road, *R. C. Pryor*. Ardley.

3. *Swere*. Bretch, Crouch Lane, *A. Fr.* Bloxham Road, Hardwick Hill, Bodicote, Broughton Road, *T. Bees*.

4. *Ray*. Headington Copse and Wick, between Oxford and Summertown, *Bz.* Bicester, *H. Bos.* Marston Meadows, Beckley, Kirtlington, Tackley, Bletchingdon.

5. *Isis*. In lane leading from Botley Road to Binsey, *Sib.*! Between North Leigh and Ashford Mill, *Bz.* Wychwood, *Hb. Lawson*! Freeland, Ditchley, Lees Rest Wood, Church Handborough.

6. *Thame*. Hedges near Shotover with *Erysiphe comata*, 1826, *Bz.*

7. *Thames*. Caversham, *Newb.* Nettlebed, common by roadsides, *A. Fr.* Abundant on the chalk, especially the northern slopes, as at Goring, Mongewell, Watlington, Grimes Dyke, Ipsden Well Place, Aston Wood, Great Wood, Hill Wood, Penley Wood, etc.

Berks. Between S. Hinksey and Bagley, *Bz.*! Cumnor, Bagley, *H. Bos.* Lowbury, Moulsoford, Tubney, etc.

ILEX. L.

1. *Aquifolium*, L. *Holly*.

Top. Bot. 274. Syme, E. B. ii. 219. 316. Nym. 144. Bx. 262.

Native. Woods and hedges. Local. Tree. May-Aug.

First record, Sib. 1794.

2. *Ouse*. Ardley, the Holly tree; probably not native in this district.

3. *Swere*. Gt. Tew, A. Fr.

4. *Ray*. Elsfield, Beckley, Tackley.

5. *Isis*. North Leigh to Ashford Mill, Bx. MSS. / Wychwood, H. Bos. / Dean, T. Bees. Charlbury, Freeland, Stonesfield, Finstock, Minster Lovell, Widley Wood near Burford, Ditchley, Wilcote, Cornbury, native.

6. *Thame*. Shotover, Sib. Near Woodperry, A. Fr.

7. *Thames*. Bix, Nettlebed, A. Fr. Caversham, Newb. Beacon Hill, Checkendon, Chinnor, abundant from Binfield to Cane End and thence to Goring. Fine trees in Woods Ipsden Heath, entire leaved form at Fawley and Ibstone.

Berks. Boar's Hill, native. Bucks, Fawley, etc. Northants, rare. Gloster, Warwick.

ORD. XXI. RHAMNEÆ, Br.

RHAMNUS. L.

[*R. Frangula*, L. *Berry bearing Alder*.

Berks. One or two bushes by Loddon River below Loddon Bridge, Earley, F. A. Lees. Sunninghill, Baker. Coleman's Moor, Phyt.

Bucks, Warwick locally common. Gloster W., Northants, very rare.]

R. catharticus, L. *Buckthorn*.

Top. Bot. 102. Syme, E. B. ii. 226. 318. Nym. 145.

Native. Septal. Woods and hedgerows. Common throughout the county. Shrub. May, June.

First record, Blackstone, 1737. *Rhamnus catharticus*, J. B.

ORD. XXII. PAPILIONACEÆ, L.

ULEX. L.

U. europaeus, L. *Furze. Gorse*.

Top. Bot. 103. Syme, E. B. iii. 4. 323. Baxt. 93. Nym. 149.

Native. Ericetal, pascual. Heaths and dry pastures. Occurs in all the districts. Shrub. Feb.-April, Aug., Sept.

First record, Sib. 1794.

U. Galli, Planch.

Syme, E. B. iii. 6. 324. Nym. 148.

First record, *the Author*, 1882.Native. Ericetal. Heaths and commons. Very local. Shrub.
July-Oct.

5. Isis. North Leigh Heath.

7. Thames. Near Woodcote and between Woodcote and Goring.

Berks. Frilford, Gloster W., Warwick.

U. nanus, Forst. Dwarf Furze.

Syme, E. B. iii. 7. 325. Nym. 148.

Native. Ericetal. Heathy places. Local. Shrub. July-Oct.

First record, *Rev. E. Fox*, 1850.1. Stour. Tadmarton Heath, *A. Fr.*!3. Swere. Epwell Heath, *R. French*.5. Isis. Wychwood, *Rev. E. Fox*.7. Thames. Binfield Heath, *Rep. of Rec. Club*, 1881Berks. Bagshot Heath, *Watson*. Sunninghill, *Hb. Br. Mus.* Earley
Common, *F. Tufnail*. Bucks, Napford Common. Northants,
Harleston Heath. Gloster W. (?).**SAROTHAMNUS. Wimm.****S. vulgaris, Wimm. Broom.**149. *Cytisus scoparius*, Link. Top. Bot. 103. Syme, E. B. iii. 9. 328. Nym.
Bart. 84.Native. Sylvestral and ericetal. Sandy places. Rare as a native
plant. Shrub. May, June.First record, *Sib.* 1794. *Spartium Scoparium*, L.1. Stour. Tadmarton Heath, *Hb. A. Fr.*! Bees.3. Swere. Gt. Tew, *A. Fr.*4. Ray. Middleton Stoney, *Rogers*. Woodstock! *Prof. Daubeny*, 1841.
Islip, *Rev. Moyle Rogers*.

5. Isis. Blenheim.

6. Thame. Albury, Nuneham.

7. Thames. Henley, *Sib.* Stokenchurch, *Hb. Bx.* Caversham, *Newb.*
Binfield, Crowsley, near Dyson's Wood, Shirburn.Berks. Bagley, *Bx.* Wootton, *H. Bos.***GENISTA. L.****G. anglica, L. Needle Furze.**

Top. Bot. 104. Syme, E. B. iii. 8. 326. Nym. 150.

Native. Ericetal. Heaths, very rare or extinct. Shrub. June.

First record, *Sib.* 1794.

5. *Isis*. Kidlington Common, Eynsham Heath, *Sib*. Wychwood, *Rev. E. Fox*.

6. *Thame*. Baldon Heath, *Prof. Daubeny*, May 23, 1839.

Berks. Beyond Childswell Farm, *Walk*. Cookham Down, *Phyt.* 1.
o. s. Pangbourne Marsh, *F. Towndrow*. Bucks, Northants,
extinct. Warwick, Gloucester W.

G. tinctoria, L. *Dyer's Green-weed.*

Top. Bot. 105. Syme, E. B. iii. 9. 328. Nym. 153. Bx. 84.

Native. Pascual. Rough pastures and wood borders. Local and rare.

Small shrub. July, Aug.

First record, *Sib*. 1794.

3. *Swere*. Near Hornton. Valley between Newington and Balscot,
Gull. Near Somerton.

4. *Ray*. Under Headington Wick Copse, *Sib*. Headington Copse near
Marston Lane; on a Common between Upper Heyford and Somerton
about 14 miles from Oxford, *Bz. Br. Pl.* Near Blackthorn, *H. Bos*.
Abundant in Somerton Railway cutting, and by Canal side above
Upper Heyford.

5. *Isis*. South Leigh, *Sib*.

7. *Thames*. Henley, *Sib*. Caversham, *J. Carrol*, 1849! Half mile
south of Maple Durham! *F. A. Lees*. Goring.

Berks. Beyond S. Hinksey, *Bz*. Bablock Hithe, Didcot, *H. Bos*.
Between Bradley and Deadman's Farm, *T. Thurland*. Blewberry
Downs, Hampstead Norris, *Newb*. Burghfield, Mortimer, *F. Tufnail*.
Cumnor Hurst, *F. T. Richards*.

** *Cytisus Laburnum, L.* The Laburnum.

Alien. Gt. Tew, *A. Fr*. Woodstock and elsewhere, frequent as a
planted tree.

ONONIS. L.

O. arvensis, L. *Rest Harrow.*

Top. Bot. 105. Syme, E. B. iii. 15. 330. Nym. 161. Baxt. 289.

Native. Glareal. Dry fields, etc. Not uncommon. P. May-Aug.

First record, *Ononis purpur. repens non spinosa præcipue circa Oxon*.
Morison, ii. 171, 1680.

1. *Stour*. Tadmarton, *A. Fr*. Stourwell.

2. *Ouse*. Mixbury.

3. *Swere*. Common, *Beesley*. Bretch, *A. Fr*. Hanwell, *R. French*.

4. *Ray*. Kirtlington, Tackley, Wood Eaton.

5. *Isis*. Charlbury, *Rev. R. Linton*. Church Handborough, *Bz. MSS*.
Bladon, Burford, Fawler, Brize Norton, etc.

6. *Thame*. Cowley Marsh, *Hb. Bz*. Sandford, *var. alba, H. Bos*.
Horsepath, Wheatley, Headington Quarries.

7. *Thames*. Stokenchurch, *Hb. Bz*. Ipsden.

Berks. Wootton.

A spinous form occurs, and is sometimes mistaken for *campestris*.

O. campestris, K. Z. *Field Rest Harrow.*

O. spinosa, L. Top. Bot. 106. Syme, E. B. iii. 15. 330. Bx. 289. Nym. 162.

Native. Pascual. Barren pastures, etc. Not uncommon. P. June-September.

First record, *Sib.* 1794.

3. **Swere.** Wroxton Mill, *Gull.* Coombe, nr. Adderbury, rare, *Bees.* Hanwell Heath, *A. Fr.* Fritwell, *T. Bees.*

4. **Ray.** Common by Canal side half a mile north of Upper Heyford! Bx. 1831. Cross roads between Middleton Stoney and Bicester, *A. Fr.* Var. *alba*, Upper Heyford, Bx. Br. Pl. Summertown, Rev. R. Linton. Charlton and Fencott, occasionally, Rev. W. Moyle Rogers. Horton, Beckley, Marston.

5. **Isis.** Between Woodstock and Bladon, *H. Bos.* Southcombe, *T. Bees.*

6. **Thame.** Shotover, *H. Bos.!* Cowley Marsh, *H. E. Garnsey!* Between Sandford and Nuneham, var. *alb.* Mr. J. Smith in Bx. Near Tiddington, *A. Fr.* Headington, Dorchester.

7. **Thames.** Beacon Hill, Nettlebed.

Berks. Wootton, Boar's Hill.

The names of our *Ononis* appear to require revision.

ANTHYLLIS. L.

A. vulneraria, L. *Lady's Fingers.*

Top. Bot. 106. Syme, E. B. iii. 19. 333. Bx. 397. Nym. 164.

Native. Pascual. Dry calcareous ground. Local. P. May-Aug.

First record, *Blackstone*, 1737. *Anthyl. leguminosa*, Ger.

1. **Stour.** Tadmarton Heath.

2. **Swere.** Horley, *Gull.* Bretch, Shutford Lane, Horley, rare, *Bees.* Deddington (!), Swalecliffe, Wiggington Heath, *T. Bees.* Stonepit below Claydon Hill.

4. **Ray.** Near Rousham, between Upper Heyford and Kirtlington, Bx. MSS.! Bayswater, *H. Bos.* Headington, *Walk.* Islip.

5. **Isis.** Burford Downs, *Sib.* Between Church Handborough and Mill, 1833, between Eynsham and Church Handborough, between Stonesfield and Woodstock, between Witney and Burford, Bx. In Ascot field, abundantly, and other places, *Blackstone MSS.* Witney, *H. Bos.* Burford, Minster Lovell, Lyneham Camp, Tainton, Stonesfield, abundant in railway cutting near Stonesfield.

6. **Thame.** Headington, *Walk.* Bullington, *Sib.!* *H. Bos.* Littlemore.

7. **Thames.** Stokenchurch Hill! *Sib.* Goring, Swincombe Downs, H.

Bos. Mongewell, Beacon Hill, Ewelme Common, Grime's Dyke, Chinnor, Ipsden, Crowmarsh, Penley Wood, Chinnor Hill, common on the Chalk.

Berks. Streatley, *H. Bos.* Frilford, Pangbourne.

MEDICAGO. *L.*

* *M. falcata*, *L.* Syme, *E. B.* iii. 23. 335. Nym. 167.

Casual. Waste ground near Oxford, *Bolton King*, 1881. Huscot Hill, near Banbury, *T. Brayne*, 1820.

* *M. sativa*, *L.* *Purple Medick. Lucerne.*

Cyb. Br. i. 283. Syme, *E. B.* iii. 21. 334. Bx. 329. Nym. 166.

Alien. Fields, railsides, and waste places. P. May-July.

3. *Swere.* Foot-road to Drayton, *T. Lees*.

4. *Ray.* Occurs in several places. It appears to have established itself and assumed a wild aspect in some broken limestone ground near Stow Wood, *H. Bos. in Phyt. n. s. vol. iv.* 101. Charlton, *Rev. W. Moyle Rogers.* Islip.

5. *Isis.* Charlbury.

6. *Thame.* Near railway, Thame, *A. Fr.* Wheatley, Great Haseley, Bullingdon.

7. *Thames.* Mongewell, Goring, South Stoke.

Berks. Moulsoford, Basildon.

* *M. arabica*, *All.*

M. maculata, *Sib.* Syme, *E. B.* iii. 26. 339. Nym. 169. Top. Bot. 107.

Alien. Waste places. Rare or extinct. A. June.

Banks of field near Physic Garden, *Sib.* 232. Ch. Ch. Meadow, *Bz.* Between St. Clement's and Iffley, *R. Walker.* Destroyed 1867.

Northants, Nene side, Duston. Gloster W., Avon side, Clifton. Warwick.

[*M. denticulata*, *W.*

Appears as a casual by the Nene banks, Northants, and near Kenilworth, Warwick.]

M. lupulina, *L.* *Black Medick. Trefoil.*

Top. Bot. 107. Syme, *E. B.* iii. 25. 337. Nym. 170.

Native. Agrestal. Fields and waysides. Common and generally distributed. A. or B. May-Aug.

First record, *Sib.* 1794.

It has sometimes foliaceous calyces. In dry situations a densely pubescent form occurs which may be worth varietal distinction.

TRIGONELLA. *L.*

? *T. ornithopodioides*, *D C.*

Syme, E. B. iii. 35. 345. Nym. 171.

Ambiguity. *Fœnugræcum humile repens ornithopoddis siliquis brevibus erectis*, Ray's *Stirp.* 1688. *Synopsis*, ed. i. ii. and iii. with plate. 'Near Oxford in the like ground' (hilly cornfields). Record copied in *Hudson*, *Smith*, *Fl. Br.*, *Eng. Fl.*, *Bot. Guide*, *New do.*, *Gough's Camden*, *Martyn*, etc.

Sibthorp omits it, and there is no more recent record than the one quoted above.

Shotover, Stow Wood border, and the sandy heaths have been vainly searched for it.

Berks. Greenham Common, *Newb.* Gloster W.

** *T. fœnugræcum*, *L.* Comp. Cyb. 498. Fœnugreek.

Casual. One plant, side of G. W. Railway. Little Bourton, *A. Fr.* Waste ground, G. W. Station, Oxford. Not even naturalized.

MELILOTUS. *Juss.*

M. altissima, *Thuill.* *Melilot.*

M. officinalis, Willd. Top. Bot. 108. Syme, E. B. iii. 29. 341. Nym. 172. Bx. 363.

Native. Viatical, septal. Fields, roadsides, newly turned-up ground, railsides, etc. A. June-Aug.

Not uncommon, and I think native.

First record, 1657, *Wm. Coles* in '*Adam in Eden.*'

3. Swere. Tadmorton, *E. Walford*. Hardwick Hill, *B. French*. Deddington, Canal side towards Franklin's Knob, *A. Fr.* Near Somerton, *Bx. MSS.*

4. Bay. Between the foot of Headington Hill and Oxford, *Wm. Coles*. Marston Lane, *Bx.* 1827. Noke, Beckley, Kirtlington, etc.

5. Isis. Lane going to Binsey! *Sib.* Between Cassington and Church Handborough, *Bx.* 1833. Wolvercote, *H. Bos.* Curbridge, *F. Westell.* Stonesfield, Bladon, Mill Wood, Oxford, Handborough rail-side.

6. Thame. Cowley field, *Bx.* 1831. Thame, one or two miles on the Oxford Road, *A. Fr.*, do. *Hb. Bx.* Iffley, *Newb.* Nuneham, Brightwell, near Thame, *H. Bos.* Wheatley, Littlemore, Wheatley rail-side.

Berks. Between S. Hinksey and Childswell Farm, *Bx.* Blewberry, *Newb.* Wittenham, by Day's Lock.

* *M. alba*, *Desr.* *White Melilot.*

Comp. Cyb. 140. Syme, E. B. ii. 31. 342. Nym. 172. Top. Bot. 109.

M. leucantha, Koch. *M. vulgaris*, Willd.

Colonist. Waste places, garden ground. Rare. B. July, Aug.

First record, *Beesley*, 1841.

3. Swere. Farm field, very rare, *T. Beesley*.

4. **Ray.** Heyford, *Rev. E. Fox.*

5. **Isis.** A casual in garden near the old church tower (miscalled the Keep) of the Castle, 1876, *W. Whitwell.* Waste ground near the station, 1884; mud dredged from the river, Osney.

Berks, Hinksey. Northants.

** *M. indica*, *All.*

M. parviflora, *Dsf.* Comp. Cyb. 498. Syme, E. B. iii. 33. 344.

Casual. Canal side, Bodicote, *A. Fr.*

[*M. officinalis*, *D.* *M. arvensis*, *Wall.*

Berks. Chalkpit between Wargrave and Henley, *Britten.* Gloster E., Warwick, casual.]

TRIFOLIUM, L.

T. medium, *Huds.* *Zigzag Clover.*

Top. Bot. 110. Syme, E. B. iii. 40. 348. Nym. 173.

Native. Pratal. Dry pastures on calcareous or gravelly soil. Local and rather rare. P. June–Sept.

First record, *Sib.* 1794, p. 229.

2. **Ouse.** Mixbury, near the river on a dry bank.

4. **Ray.** Headington Wick and Stow Wood, *H. Bos.*! Railway cutting near Tackley fine specimens.

5. **Isis.** Between Woodstock and Enstone, South Leigh, *Sib.* Stonesfield.

6. **Thame.** Right-hand side of road going up north side of Shotover from Headington Quarry, nearly opposite the spring, *Bz. MSS.* 1831.

7. **Thames.** Caversham Meadows, *F. Tufnail.*

Berks. South Hinksey, *Bz. MSS.* Wargrave, *Melv.* Near Reading, *F. Tufnail.*

T. pratense, *L.* *Red Clover.*

Top. Bot. 110. Syme, E. B. iii. 37. 347. Nym. 173. Baxt. 253.

Native. Pratal. Meadows and pastures. Common and generally distributed. A. or P. May–Sept.

? First record, *Merrett*, 1666. *T. pratense capite sertaceo* [setaceo].

‘In the meadows seven miles on this side Oxford.’

Much sown for fodder, but the wild plant is also of frequent occurrence. The flowers of the fodder plant, *T. sativum*, *Mill.*, vary in colour from white to purplish red. The wild state rarely produces white flowers.

* **T. incarnatum**, *L.* *Crimson Clover.*

Comp. Cyb. Br. 498. Syme, E. B. iii. 44. 352. Nym. 174.

Alien. Field borders, etc., a stray from cultivation. Rare. A. May–August.

3. **Swere.** Crouch Hill, *A. Fr.*, *Milton*, *E. Walford.*

4. **Ray.** It appears to have established itself and assumed a wild aspect in some broken limestone ground near Stow Wood, *H. Boswell in Phyt.* iv. 101. 1860. First record.

6. **Thame.** Near Bensington, Bullingdon, white and red.

7. **Thames.** South Stoke.

Berks. Frilford, Twyford, white flowers.

Frequently cultivated on the Lower greensand, the fields presenting a most beautiful appearance when in full flower. A white variety was noticed near South Stoke, but in other respects it was typical. Similar plants also occurred at Bullingdon.

T. arvense, L. *Haresfoot Trefoil.*

Top. Bot. 111. Syme, E. B. iii. 46. 354. Nym. 175.

Native. Glareal. Sandy fields. Local and rare. A. June–Sept.

First record, *Plot*, 1677. *Lagopus major vulgaris*, Park.

3. **Swere.** Walls at Shenington, *Gull*. Banbury churchyard, Bretch, A. Fr. Lower Tadmarton, Epwell Heath, *T. Bees*. Shutford.

4. **Ray.** Stow Wood, plentifully, and other places, *Plot*; there in 1884, but scarce. Headington, *Sib.* Elsfield, Islip, Headington Wick! *H. Bos.* Between New Inn and Beckley, *Bz.*

6. **Thame.** Near Bullingdon Green, cornfields south of Asylum, *Bz.*

Berks. Wootton, *H. Bos.* Sunningwell, Tubney, Frilford.

T. scabrum, L. *Rough Trefoil.*

Top. Bot. 112. Syme, E. B. iii. 49. 357. Nym. 176.

Native. Glareal. Dry banks and sandy fields. Local and rare. A. May–Aug.

First record, *Sib.* 1794.

3. **Swere.** Bretch, *Bees.*!

4. **Ray.** Fields opposite Stow Wood, *F. T. Richards, M.A.*!

5. **Isis.** Near Jericho, on the roadside going to Port Meadow, *Sib.*, do. *Bz.* 1819, in *Purton. App.* now extinct. Stonesfield, *H. Bos.*

6. **Thame.** Between Cheney Lane and Shotover Hill, *Bz.* 1819 in *Purton*, do. in *Hb. Bz.* In old stonepits between Headington Quarry and London road, 1823. South side of Shotover near the road, 1823. Old stonepits Bullingdon Green, 1828–1831, *Bz. MSS.* 1885. Near Warnford Asylum, *H. Bos.* Shotover Hill by the old London road, *R. Walker.*

Berks. Frilford and Tubney, *Rep. of Rec. Club*, 1881. Northants rare. Gloster E., Warwick.

T. striatum, L. *Soft Knoll'd Trefoil.*

Top. Bot. 112. Syme, E. B. iii. 48. 356. Nym. 176.

Native. Glareal. Dry pastures, field banks. Local and rare. A. June–Aug

First record, *Sib.* 1794.

3. Swere. Bretch, *E. Walford.*

5. Isis. Wychwood Forest, *Sib.* Jericho, *Sib.* and *Bz.* in *Purton*, 1818.

6. Thame. Bullingdon Green, *Sib.*, do. *Bz.* 1831 in *Walk.*; spec. in *Hb. Bz.* Between Cheney Lane and Shotover, *Bz.* 1819. Between Horsepath and Shotover, 1861, *H. Bos.*

Two forms occur, one much larger and more erect.

Berks. Near Cothill.

T. subterraneum, L.

Top. Bot. 110. Syme, E. B. iii. 36. 346. Nym. 177.

Native. Glareal. Sandy and gravelly soil. Very rare. A. June.

First record, *Sib.* 1794.

4. Ray. Enslow Quarries, *Rev. E. Fox.* Edge of Stow Wood, 1860, *H. Bos.*

6. Thame. On Shotover Hill by the road to Cuddesdon, *Sib.*, do. 1812 and 1820 *Bz.* in *Purton app.* Near the second windmill by the side of road between Shotover and Cuddesdon, *Bz. MSS.*

Berks. About Pangbourne, *W. Pamplin in Phyt.* v. 155.

Bucks. Gloster. Warwick very rare, three localities.

T. fragiferum, L. *Strawberry-headed Clover.*

Top. Bot. 114. Syme, E. B. iii. 58. 363. Nym. 177.

Native. Pascual. Roadside and damp meadows. Not uncommon.

P. July-Sept.

First record, *Sib.* 1794.

1. Stour. Tadmerton.

2. Ouse. Mixbury.

3. Swere. Crouch Lane, Broughton, *A. Fr.*

4. Ray. Marston Lane, *Sib.* Headington Wick, Elsfield, *H. Bos.* Oddington, Wood Eaton, Summertown.

5. Isis. Port Meadow! *Hb. Lawson.* Between Botley Toll-gate and Medley Lock, *Bz.* North Leigh, Ascot.

6. Thame. Iffley Meadows, *Sib.* Shotover, Cheney Lane, *Bz.* Near the Warnford Asylum, *H. Bos.* Nuneham, Dorchester.

Berks. Abingdon, Radley.

* **T. hybridum, L.** *Alsike Clover.*

Alien. Syme, E. B. iii. 53. 361. Comp. Cyb. 498. Nym. 178.

First record, *A. French* 1870. Var. *T. elegans*, Savi.

3. Swere. Gt. Tew, Somerton, *A. Fr.* Adderbury, *T. Bees.*

5. Isis. Burford.

6. Thame. Bullingdon.

7. Thames. South Stoke.

Formerly cultivated as a fodder plant, now little used.

Berks. Bucks, Northants.

T. repens, L. *Dutch Clover.*

Top. Bot. 109. Syme, E. B. iii. 55. 362. Nym. 178.

Native. Pascual. Meadow pastures, waysides. Area general. Very common. P. May-Oct.

First record, *Sib.* 1794.

Undoubtedly native. It is found even in the college quads.

The flowers are not unfrequently rosy. The calyces are sometimes deformed.

Var. 8. *T. phyllanthum*, Seringe. Hanwell, *T. Bees.*, and on Epwell Hill 743 feet.

**T. agrarium, L.* Nym. 180.

Casual. In a clover field near South Stoke 1885.

T. procumbens, L. *Hop Trefoil.*

Top. Bot. 114. Syme, E. B. iii. 60. 365. Nym. 180.

Native. Pascual. Cornfields, dry pastures, railsides, etc. Generally distributed but not a very common plant. A. June-Aug.

First record, *Sib.* 1794.

There are two forms, the smaller may be *T. pseudo-procumbens*, Gmel.; it occurred on Bullingdon quarries.

T. dubium, Sibth. *T. minus, Sm.*

Top. Bot. 114. Syme, E. B. iii. 62. 366. Nym. 180.

Native. Pascual. Meadows, pastures, etc. Area general; rather more frequent than *T. procumbens*. A. June-Aug.

First record, *Sib.* 1794.

Often covered with a mildew.

T. filiforme, L.

Top. Bot. 115. Syme, E. B. iii. 63. 367. Oxford. Nym. 180.

Native. Ericetal. Heaths. Local and rare. A. June-Aug.

First record, *Sir Jos. Banks* near Oxford, about 1760.

3. *Swere.* Bretch, *T. Bees.*

5. *Isis.* South Leigh Heath, *Sib.* extinct. Near Coombe Wood, *H. Bos.*

Ramsden Heath, *T. Westcombe* extinct. Finstock Heath 1884,

North Leigh Heath 1884, see *Rep. of Rec. Club*, 1881.

6. *Thame.* Bullingdon Green, *Sib.*

The Bretch plant I am inclined to believe was a starved form of *dubium, Sib.*

Berks. Frilford. Bucks, Napford Common. Northants, Boro. Hill needs confirming. Gloster, Warwick rare.

LOTUS. L.

L. pilosus, Beeke in Bot. Guide 1805. *L. uliginosus, Sch.* 1808.

L. major Sm. L. corniculatus var. b. Sib. Lotus pentaphyllos flore majore luteo splendente, Rail.

Top. Bot. 116. Syme, E. B. iii. 68. 370. Nym. 182.

Native. Pratal. Wet meadows, marshes, brooksides. Widely distributed, but not very common. P. July–Sept.

First record, *Sib.* 1794.

1. Stour. Tadmarton.

2. Ouse. Hethe.

3. Swere. Hanwell, *Bees*. Great Tew, between Bloxam and Tadmarton, *A. Fr.* Shutford.

4. Ray. Headington Wick! *H. Bos.* Oddington, *Rev. W. Moyle Rogers*. Stow Wood, Bayswater, Marston, Somerton, Tackley.

5. Isis. Wychwood! *H. Bos.* Canal above Wolvercote, *H. E. Garnsey*. Bruern, North Leigh Common, Finstock Heath.

6. Thame. Peat bog under Bullingdon Green, *Sib.*! Shotover! *H. Bos.* Thame, *Hb. Bz.* Waterperry, *A. Fr.* Cowley Marsh, Albury, Wheatley railside abundant.

7. Thames. Nettlebed Common, hairy form, *A. Fr.* Binfield, Stokerow. Berks. Bagley, *Bz.* Frilford, Wootton.

It varies very much as to degree of pubescence, and should perhaps be divided into two varieties as in E. Bot. i.e. *subglaber* and *hirsutus*—the latter is more frequent in Oxford.

***L. tenuis*, Kit.**

Syme, E. B. iii. 67. 369. Nym. 183.

Native. Pascual. Meadows, waste places on clay soil. Local and rare. P. July–Aug.

First record, *Walker*, 1832.

4. Ray. Marston brickyards 1883, *Rep. of Rec. Club*. Near Bicester.

5. Isis. Near Duke's Lock 1885.

6. Thame. In the broad greensward path leading off the Cowley Road near the gate up to the Asylum, *R. Walker*, 1832.

7. Thames. Rough barren field west of Chazey Farm, *F. A. Lees*, see *Rep. of Rec. Club*, 1883.

Berks. Heath near Crowthorn, *Brit.* Wootton.

***L. corniculatus*, L. Bird's-foot Clover.**

Top. Bot. 115. Syme, E. B. iii. 65. 368. Nym. 183. Bx. 249.

Native. Pascual. Pastures. Area general. Common. P. May–Sept.

The var. *L. villosus*, Syme, occurs near Stow Wood, and a singular form with small foliage and single flowered (*not tenuis*) on the chalk hills above Chinnor.

ORNITHOPUS. L.

***O. perpusillus*, L. Common Bird's-foot.**

Top. Bot. 118. Syme, E. B. iii. 77. 378. Nym. 186. Baxt. 358.

Native. Glareal. Heaths and sandy pasture. Local and rare. A. May-July.

First record, *Sib.* 1794.

1. Stour. Tadmarton Heath, rare, *T. Beesley*! 1884.

6. Thame. Between Shotover and Cuddesdon! *Sib.* Near Shotover, close to Ochre pits, on a bank sloping south, in great abundance, *Bz.* 1831! 1884. Between Shotover and Cuddesdon, on a bank near the Windmill, *Bz.*; do. *H. E. Garnsey, M.A.*! Horspath, towards Coombe Wood, 1862, *H. Bos.*! Shotover, north side, 1884.

Berks. Between Bessilsleigh and Tubney, *Bz. MSS.* Blewbury and Hampstead Norris, *Pamplin.* Frilford.

HIPPOCREPIS. L.

H. comosa, L. Horse-shoe Vetch.

Top. Bot. 119. Syme, E. B. iii. 79. 380. Nym. 186. Baxt. 369.

Native. Pascual. Dry pastures, on calcareous and chalky soil. Locally abundant. P. May-Aug.

First record, *Ferrum equinum germanicum siliquis in summitate*, Raii. *J. J. Dillenius*, about 1730.

3. Swere. Bretch, *E. Walford.* Swalecliffe Common, *A. Fr.*

4. Ray. About half a mile on the Oxford side of Beckley, *J. Dillenius.* Heyford, *Rev. E. Fox.*

5. Isis. In chalk-pits in the same (Ascot) field, also by the roadside near Hunsfield, plentifully, *Blackstone*, 1737. Burford Downs, *Sib.* Between Woodstock and Enstone, *Rev. W. T. Bree*, in *Purton's App.*; do. in *New Bot. Guide.* Lees Rest and Fifield, *T. Westcombe.* Southcombe, near Chipping Norton, *T. Bees.* Between Burford and Minster Lovell, abundant by roadsides between Charlbury and Ditchley Park, and between Ditchley and Blenheim, north entrance, on what was probably Wootton Heath, Lyneham Camp, Tainton Quarries.

6. Thame. Bullingdon Green! *Sib.* Headington Quarry, 1831, *Bz. in Walk.* Bullingdon Green, 1861, *H. Bos.*! 1885. Holton Quarries.

7. Thames. Stokenchurch! *Sib.* Henley, *Bz.* Penley Hangings, *Hb. Bz.* Caversham, *Hb. Br. Mus. J. Carroll*, 1849. Lewknor, Maple Durham, *A. Fr.* Gathampton, *H. Bos.* Goring Downs, Grime's Dyke, Beacon Hill, Pyrton Common, magnificent, Chinnor Hill, most abundant, and confined to lower chalk; on the tertiary capping it, *Lotus corniculatus* replaces it. It is abundant and beautiful on the railbanks about Goring.

Berks. Streatley, and generally on the chalk. Bucks, Bledlow.

Fawley, etc. Northants, Cellyweston, Barnack. Gloster. Casual only in Warwick.

** *Robinia Pseudacacia*, L. A North American tree, is frequently planted about Oxford and elsewhere.

ASTRAGALUS. L.

A. glycyphyllus, L. *Milk Vetch*, *Wild Licorice*.

Top. Bot. 116. Syme, E. B. iii. 75. 375. Nym. 193.

Native. Septal. Under hedges, calcareous pastures. Local. P. June–Sept.

First record, *Wm. Coles* in *Adam in Eden*, 1657.

2. Ouse. Fimmere Castle, *R. C. Pryor*.

3. Swere. Deddington Castle, Andrew's pit, Bretch, *A. Beesley*. Hanwell footroad (not there now), *Gull*. Canalside towards Franklin's Knob, *A. Fr.* Penhill, *R. French*. Adderbury Town End, in Butler's Close, *Wm. Coles*, 1657. Beyond Bodicot, on Oxford Road, *Bees*. Near Swalecliffe Mill.

4. Ray. Side of ditch round Headington Copse, near Marston Lane, *Walk*. Wood Eaton, *H. Ridley*. Water Eaton, *H. Bos*. Gibraltar Rocks! *Rogers*. Middleton Stoney, Stow Wood, near Tackley.

5. Isis. Lawn near Capt. Jenkinson's Lodge, Wychwood, *Blackstone MSS.* 1737; do. in *Martyn*, *Gough*, etc. Borders of Wychwood, *Prof. Daubeny*, 1842. Stonesfield! *F. T. Richards*, *M.A.* North Leigh! *Hb. Bx.* Coombe.

6. Thame. Cuddesdon, near the Palace, *R. Walk*.

Berks. Wytham Wood, *Purton*! S. Hinksey, *Walk*! Happy Valley, *Pusey*, *H. Bos*. Cumnor.

A. danicus, *Retz.* *A. hypoglottis*, L.

Top. Bot. 117. Syme, E. B. iii. 75. 376. Nym. 194. Bx. 453.

Native. Glareal. Dry calcareous roadsides. Extremely rare. A. June, July.

First record, *Dr. Lightfoot*, about 1760. *A. hypoglottis*, L.

5. Isis. Burford Downs, on road between Burford and Cirencester, about four miles from Burford, *Dr. Lightfoot*, note in *Dillen's Ray*. Burford Downs, *Sib.* 1794, now extinct. Between Burford and Witney, under a wall on roadside three or four miles from former place, *Bart.* 1831, plate no. 453, drawn from specimen, gathered in this locality, which is preserved in *Hb. Bx.* Southcombe Common, near Chipping Norton, *T. Bees*. extinct.

The rarity of this plant in Oxford is rather remarkable.

Northants, Barnack, Southorpe, etc. Gloster.

ONOBRYCHIS. *Lam.*

O. sativa, Lamk. *Sainfoin. Hedysarum Onobrychis, L.*

Top. Bot. 119. Syme, E. B. iii. 81. 381. Nym. 198. Bx. 134.

Native. Pascual. Dry pastures, on calcareous or chalky soil. Locally common. P. June-Aug.

First record, *Onobrychis seu caput Gallinaceum*, 'it is sown about Charlbury, and called by the inhabitants Sainefoine,' *Blackstone MSS.* 1737.

2. Ouse. Mixbury.

3. Swere. Bretch, *Gull.* Bourton, *A. Fr.* Cropredy, *O. V. Aplin.* Banbury railside, *T. Bees.*

4. Ray. Headington Wick Copse. Between Begbroke and Woodstock, *Bx.* Beckley, *A. Fr.* Gibraltar Rock, *Rogers.* Kirtlington.

5. Isis. Wolvercote, *Rev. R. Linton.* Woodstock, *Rogers.* Fawler, *H. Bos.* Minster Lovell, Burford, Ditchley, Finstock, Wilcote, Stonesfield, etc.

6. Thame. Bullingdon, *Sib.* Field near Cheney Lane, *Bx.* Great Haseley Quarries, Wheatley.

7. Thames. Henley, Stokenchurch, *Sib.* Caversham, most abundant, *Newb.*; do. *W. Pamplin.* Goring, Mongewell, Ipsden, Chanse Heath.

Berks. Jenny Bunting's parlour, *H. Bos.* Childswell Farm, *Bx.* Frilford.

** *Pisum sativum, L.* The Garden Pea occurs as a casual plant occasionally by field borders, etc., but it does not become naturalized.

LATHYRUS. *L.*

** *L. latifolius, L.* *The Everlasting Pea.*

Alien. Garden hedge, Cropredy. Berks, Tubney Wood, *B. Bx.*

L. sylvestris, L. *Everlasting Pea.*

Top. Bot. 125. Syme, E. B. iii. 107. 402. Nym. 201. Bx. 433.

Native. Sylvestral and septal. Woods, hedges, and bushy places.

Local. P. June-Aug.

First record, *Sir Jos. Banks*, 1760.

4. Ray. Bicester, *Hb. Br. Mus. E. Chandler*; do. *Rev. E. Fox.* Side of ditch round Headington Copse, not far from Marston, *Bx. in Walk.*; do. in *Hb. Bx.*

5. Isis. Hedge at Burleigh Farm, Cassington, *W. Mathews, M.A.,* 1884. Stonesfield, *F. T. Richards, M.A.* Sargrove, *T. Bees.* Fawler, abundant.

6. Thame. *Hb. Br. Mus. Sir Jos. Banks*, Woods near Oxford. Copse under Shotover, *Sib.*; do. in *Bot. Guide, New do., Purton, Sm. Fl. Br., Sm. Eng. Fl.,* in *Hb. Lawson.* Still on Shotover and in

Horspath Lane, between Marsh Baldon and Chiselhampton, *T. Thurland*. Clifton (Clifden) in several hedges near. MSS. note in *Ray. Sym.* copied for me by *Mr. Pamplin*. Very abundant and fine on both sides of the railway between Wheatley and Shotover tunnel.

Berks. Bagley Wood, *Bz.* S. Hinksey, *Purt.* Wytham, Tubney, Ashridge Wood.

L. pratensis, L. *Meadow Vetching.*

Top. Bot. 125. Syme, E. B. iii. 104. 400. Nym. 202.

Native. Pratal and septal. Meadows, hedges, pastures. Generally distributed and abundant. P. June–Sept.

First record, *Sib.* 1794.

The early leaves have their auricles much enlarged, so as to give an aspect rather similar to *Aphaca*, which has led to errors of record. With *Erysiphe Lathyri*, Grove at Shotover, *Bz.* It occurs abundantly in Ch. Ch. Meadow.

L. Missolia, L. *Crimson Vetching, Grass Vetch.*

Top. Bot. 125. Syme, E. B. iii. 102. 398. Nym. 204.

Native. Pascual. Fields, quarries, and railsides. Local. A. May–July.

First record, *Sib.* 1794.

3. Swere. Cornfield between Shutford and Bourton, *Gull.* Very rare, *Bees.*

4. Ray. Marston brickworks.

5. Isis. South Leigh, *Sib.* Hedgebank near Eynsham, on the Oxford side of river, pointed out to me by James Benwell, 1812, *Bz.* MSS. Abundant above Wolvercote by railside.

6. Thame. Nuneham, on the right-hand side of the London road, near the four-mile stone, *Sib.* Hedge in a field above lower road, East of Iffley Church, *Dr. Williams, MSS.* Shotover, *Rev. Dr. Cradock, Principal of B. N. C.* Headington brickfield, on Kimmeridge clay, see note in *Rep. of Rec. Club*, 1880, p. 144.

Berks. Between old and new road to Eynsham, about half a mile from the bridge. Stone-pits half a mile S.W. from South Hinksey, *Walk.* Near the mouth of the Kennet, *F. Tufnail.* Wootton brick-pits.

L. Aphaca, L.

Top. Bot. 124. Syme, E. B. iii. 101. 397. Nym. 204.

Native. Agrestal. Cornfields, under hedges. Local, and very rare. A. June, July.

First record, 1746, *Blackstone, Aphaca.*

4. Ray. In cornfields between Oxford and Woodstock, *Blackstone*; do. in *Martyn, Gough*, etc. In some abundance on Clay Hill, a large

- field on the outskirts of Kirtlington Village, on road to Woodstock a fieldway runs down the northern side of this field, and the plant grows between the path and hedge, *W. W. Sanders*, 1831. Near Woodstock, 1839, *Mrs. King*. Near Bicester, *T. Brayne*.
5. *Isis*. *Bot. Guide* and *New Bot. Guide*, give South Leigh, *Sib*. These are errors, the record of *Nissolia* being accidentally referred to this species.
 6. *Thame*. Cowley, on right-hand side of London road, near the one-mile stone, *Sib*. Extinct. Under hedge south side of road going from St. Clement's to Cowley Marsh. Hedge on south side of same Marsh, *Bz. in Walk*. Between Roman Catholic Chapel and Asylum. Meadow near Ifley, *R. Walker*.
 7. *Thames*. Between Caversham and Maple Durham, *Sib*.
- Berks*. Near Moulsoford, *Rep. of Rec. Club*, 1881. *Bucks*, *Gloster*, *Warwick*. Alien, perhaps extinct; *Northants*, very rare!

OROBUS. L.

O. tuberosus, L. *Lathyrus macrorrhizus*, W.

Top. Bot. 126. Syme, E. B. iii. 111. 406. Nym. 205. Bx. 433.

Native. Sylvestral. Woods and coppices. Local, and rather rare. P. May-July.

First record, *Sib*. 1794.

3. *Swere*. Lovell's lynchies, Hook Norton, *A. Fr*. Swerford Park, beyond North Newington, rare, *A. Beesley*. Epwell Heath.

4. *Ray*. Tackley Heath.

5. *Isis*. Asthalleligh, *F. Westell*. Charlbury, Ditchley, Bruern.

6. *Thame*. Shotover, *R. C. Pryor*.

7. *Thames*. Between Caversham and Maple Durham! Henley, *Sib*. Nettlebed, *A. Fr*. Saunders' Green, College Wood, Woods near Cane End.

Berks. Bagley. *Bucks*, *Northants*, *Gloster*, *Warwick*.

The broad-leaved form alone occurs.

VICIA. L.

V. sylvatica, L. *Wood Vetch*.

Top. Bot. 120. Syme, E. B. iii. 90. 387. Nym. 206. Bx. 193.

Native. Sylvestral and Septal. Woods and hedges. Local. P. June-Aug.

Orobis sylvaticus, *nost*. Syn. ii.

First record, *Blackstone*, 1737.

5. *Isis*. Hedge going from Burford to Wychwood, and between Fulbrook and the 'Hit or Miss' Public-house, Lees Rest Wood.

Wood at Coombe, *G. Coles, Esq. in Bz.* In Charlbury Lane near the bridge, sparingly, *Blackstone MSS.* 1737. Cornbury Park, *J. M. Albright, Esq.* Borders of Wychwood, *Prof. Daubeny*, 1841. Medley Grove, *Sib.* Mill Wood.

Berks. *Vicia sylv. flore albo*, near Oxford, *Mr. Bobart, Jun.*, in *Merrett*, 1666. Merley Wood, near Oxford, *J. Bobart* in *Ray, Ed.* ii., iii. Spec. in *Hb. Dillen.* Wytham Wood, *H. Bos.* 1859. Do. 1883, *G. C. D. (Merley)*, Appleton Wood, *H. Bos.* Tubney Wood, Yattendon. In *Smith's English Flora* it is stated 'that James Bobart the younger is said to have met with it in Oxford, which Sibthorp's *Flora* confirms.' Oxford is also quoted for this plant in *Bot. Guide, Gough, Martyn*, etc.

[*V. orobus.* *Orobis sylvaticus.* Upper part of Merley Wood, near Oxford, see *With. Ed.* vii., vol. iii. 836. Should be *sylvatica.* *Gloster E.*]

V. Cracca, L. *Tufted Vetch.*

Top. Bot. 121. Syme, *E. B.* iii. 87. 385. *Nym.* 206.

Native. Septal. Woods, hedges, etc. Common and generally distributed. P. July-Sept.

First record, *Sib.* 1794, p. 223. Our most widely diffused and most common Vetch; it is plentiful by the Cherwell, close to Oxford.

V. sepium, L. *Bush Vetch.*

Top. Bot. 123. Syme, *E. B.* iii. 91. 388. *Nym.* 208.

Native. Sylvestral. Woods, hedges. Not uncommon. P. May-July.

First record, *Sib.* 1794.

1. **Stour.** Tadmarton, Sibford.

2. **Ouse.** Stoke Lyne, *E. Fry, Esq.* Ardley Wood.

3. **Swere.** Andrew's pits, *Gull.* Twyford, *F. French.*

4. **Ray.** Banbury, Shutford, Middleton Stoney, Weston-on-the-Green, Stow Wood. Plentiful by canalside between Heyford and Kirtlington.

5. **Isis.** Ditchley, Wychwood, Minster Lovell, Fawler, Ashford Mills, Mill Wood, Burleigh Wood, etc.

6. **Thame.** Shotover plantation, Albury, Wheatley.

7. **Thames.** Mungewell, *var. alba.*, *B. King.* Chinnor, Whitchurch, Nuffield, Binfield, Withy Coppice, Aston Wood, Goring, Clump House Wood, Great Wood, Stokenchurch Wood, Penley Wood, etc., etc.

Berks. Bagley, *H. Bos.* Tubney, Frilford, Streatley, Ilsley, Basildon, etc.

***V. sativa, L. (Fr.) Vetch.**

Syme, E. B. iii. 96. 392. Nym. 210.

Casual. Cornfields and cultivated ground. Occurs in a more or less casual manner in all the districts. A. June–Aug.

First record, *Sib.* 1794.

V. angustifolia, Retz. Wild Vetch.

Top. Bot. 120. Syme, E. B. iii. 97. 393. Nym. 210.

Native. Glareal. Heaths, dry banks, etc. Not uncommon. A. April–July.

First record, *V. sylvestris flore ruberrimo, siliqua longa nigra*, D. Bobart in 2nd Edit. of Ray, 1696, 'On Shotover and divers other places.'

Var. *V. segetalis*, Th.

1. Stour. Tadmarton.

3. Swere. Bretch, A. Fr. Broughton, T. Bees.

4. Ray. Stow Wood, H. Bos. Elsfield, Marston, Heyford.

5. Isis. Wolvercote, H. Bos. Stonesfield, Charlbury.

6. Thame. Shotover, Bullington, Littlemore, Headington.

7. Thames. Goring, Caversham, Ipsden, etc.

Berks. Boar's Hill, Bagley.

Var. *V. Bobartii*, Forst. I have called it *Bobartii* in honour of Bobart, whose name Ray has taken, and who was probably the discoverer of it in Oxon. As the elder Bobart died in 1679, and this plant is not mentioned in the first edition of Ray, it was probably his son, and successor in the care of the gardens, whose name Ray has adopted. Sir J. Smith, *Trans. Linn. Soc.* 442, 1833.

4. Ray. Stow Wood borders! *Sib.*

6. Thame. Shotover! *Bobart*. Do. in *Sm. Fl. Br.*, etc.

7. Thames. Whitchurch.

Berks. Frilford, Boar's Hill.

V. lathyroides, L.

Top. Bot. 120. Syme, E. B. iii. 98. 395. Nym. 210.

Native. Glareal. Dry sandy banks and fields. Very rare. A. May, June.

First record, H. Boswell, 1860. Phyt. iv. n. s. 100.

4. Ray. Between Stow Wood and Headington Wick! H. Bos. Roadside near Stow Wood! H. Ridley, M.A.

Berks. In meadows under Bagley Wood, near Bayworth, Sunningwell, H. Bos. Bucks, Warwick, two localities.

** *Vicia Faba*, L. occurs as a stray from cultivation in waste places and hedgerows, but is not permanent. Near Thame, A. Fr. Wolvercote, Whitchurch, etc.

ERVUM, L.**E. hirsutum, L.** *Common Tare.**Vicia hirsuta*, Koch. Top. Bot. 123. Syme, E. B. iii. 84. 382. Nym. 211. Bx. 322.

Native. Septal. Hedges, railbanks, waste places. Rather uncommon.

A. June-Aug.

First record, *Sib.* 1794.3. Swere. Broughton, *R. French.*4. Bay. Stow Wood, *H. Bos.* Elsfield, Heyford.5. Isis. Wychwood, *Hb. Lawson.* Charlbury, *H. E. Garnsey, M.A.* Hailey, *H. Bos.* Lees Rest, Stonesfield, Handborough, Wolvercote, Chadlington.6. Thame. Near Thame, *A. Fr.* Do. in *Hb. Bx.* Not common about Oxford, *Bx.* Wheatley, Littlemore, Marsh Baldon.7. Thames. Goring, *Rev. F. Bennett.* Caversham.

Berks. Frilford, Moulsoford.

E. tetraspermum, L.*Vicia tetrasperma*, M. Top. Bot. 123. Syme, E. B. iii. 85. 383. Nym. 212.

Native. Septal. Hedges, cornfields, and waste places. Rather uncommon. A. May-Aug.

First record, *Sib.* 1794.3. Swere. Crouch Lane, Neithrop, *Hb. Br. Mus., A. Fr.* Tadmarton, Broughton, Hardwick Hill, *A. Fr.* Epwell Hill.

4. Bay. Elsfield, Kirtlington.

5. Isis. Stonesfield, Finstock, Handborough, Charlbury.

6. Thame. Thame, *Hb. Bx.* Oxford, *Miss Cox in Hb. Lawson.* Dorchester, *Rev. F. Bennett.* Headington Quarries, Albury, Wheatley.7. Thames. Between Henley and Assington, *H. Bos.* Caversham.Berks. Bagley, copse near Jenny Bunting's parlour, *H. Bos.* Childs-well Farm, *Bx.* Boar's Hill.**E. gracile, DC.***Vicia gracilis*, Lois. Syme, E. B. iii. 86. 384. Nym. 212.

Native or Colonist. Grassy ground, railsides, rough waste places.

Local. A. May-July.

First record, *the Author*, 1879.5. Isis. Wolvercote, *H. Peake* and *L. Lester, B.A.* 1884. Abundant! Railside between Handborough and Coombe.

6. Thame. Waste ground Cowley, 1879, Wheatley.

Berks. Wytham 1861, *H. Bos.* Near third milestone on Eynsham Road, *H. Bos.* and *T. Thurland.*

ORD. XXIII. ROSACEÆ. *Juss.*

PRUNUS. L.

**** P. Laurocerasus, L.** *Cherry Laurel.*

Alien. Frequently planted in shrubberies and ornamental grounds, as between Enstone and Great Tew, Blenheim, Middleton Park, etc.

**** P. Padus, L.** *Bird Cherry.*

Syme, E. B. iii. 123. 413.

Alien. Occurs as a planted tree at Broughton, *A. Fr.*; in Middleton Park, *Rev. E. Fox*. There is a fine tree in Magd. Coll. Gardens. [Planted in Northants and Warwick; doubtfully wild in Gloucester.]

P. Avium, L. *Gean, Mazzard Plum.*

Top. Bot. 129. Syme, E. B. iii. 119. 411. Nym. 213.

Native. Sylvestral and Septal. Coppices and hedges. Not uncommon. Tree. April, May.

First record, *Sib.* 1794.

1. **Stour.** Hotley Farm, Tadmarton.

3. **Swere.** Hanwell Park, *A. Fr.* Bloxham Road, *T. Bees*.

4. **Ray.** Marston Lane! *Bz.* Stow Wood, Noke, Beckley, Rousham.

5. **Isis.** Woods near Ashford Mill, *Sib.* Freeland, Wychwood, Fawler, Woodstock.

6. **Thame.** Shotover plentiful, Thame, *Hb. Bz.*

7. **Thames.** Goring, College Wood, Withy Coppice, Christmas Common, Cookley Green, Stokenchurch. Abundant about Ipsden; some large trees.

8. **Berks.** Unwell Wood, Tubney, Boar's Hill.

P. Cerasus, L. *Cherry Plum.*

Top. Bot. 129. Syme, E. B. iii. 122. 412. Nym. 213.

Denizen or native. Septal. Hedges. Local. Tree. April, May.

First record, *Sib.* 1794, *umbellis subpedunculatis, foliis ovato lanceolatis glabris conduplicatis*, Syst. Veg. 463; *cerasus sylvestris fructu rubro*, Raii.

3. **Swere.** Hanwell grounds, *A. Fr.* Pinhill, *R. Trench*. Frequent in hedges, *T. Bees*. Milton, Bloxham Road, *A. Fr.*

4. **Ray.** Stow Wood, 1856, *H. Bos.* Near Rousham.

5. **Isis.** Wychwood.

7. **Thames.** Woods near Watlington Park, *A. Fr.* Stokenchurch, Goring, and Woodcote, Ipsden Heath, Ipsden, Chinnor, Stoke Row, near Binfield, etc.

Berks. Bagley Wood, *Bz.* Illey. Bucks, Fawley. Northants, Warwick. This appears to be distinct from *Avium*.

***P. domestica, L.** *Wild Plum.*

Comp. Cyb. 500. Syme, E. B. iii. 118. 410. Nym. 213.

Denizen. Septal. Hedges and thickets. Not uncommon. Shrub.
April, May.First record about 1840, *W. Baxter.*

2. Ouse. Hardwick.

3. Swere. Between Grove Mill and Milton, *A. Fr.* Hardwick, *T. Bees.*4. Ray. Near Islip one bush, *Rev. W. Moyle Rogers.* Water Eaton,
Upper Heyford.

5. Isis. Finstock, Walcote, Foscott.

6. Thame. Waterstock, *A. Fr.* Sydenham, *Hb. Bx.* Iffley.

7. Thames. Ipsden, Nettlebed, Crowsley.

Berks. Kingston, Wootton, Bagley.

P. institia, L. *Bullace.*

Top. Bot. 127. Syme, E. B. iii. 117. 409. Nym. 214.

Denizen. Septal. Hedges. Not unfrequent. Shrub. April, May.

First record, *Sib.* 1794.

2. Ouse. Hardwick.

3. Swere. Banbury, etc., *A. Fr.* Broughton, Wigginton Heath, *T. Bees.*

4. Ray. Kirtlington, Noke, Water Eaton, Upper Heyford.

5. Isis. Stonesfield, Woodstock.

6. Thame. Iffley.

7. Thames. Stoke Row, etc.

Berks. Bagley Wood, Hinksey, and in all the border counties.

P. spinosa, L. *Blackthorn, Sloe.*

Top. Bot. 126. Syme, E. B. iii. 115. 408. Nym. 214.

Native. Septal. Woods, hedges. Abundant throughout the county.

Shrub. March-May.

First record, *Sib.* 1794With *Polystigma rubra*, Pers. and *Puccinia pruinorum*, Link. on it
about Oxford, *Bx.***P. fruticans, Wh.** ? *P. coëstanea*, Syme. Nym. 214.

Native. Septal. Hedges. Not uncommon. Shrub. April, May.

First record, *the Author*, 1880.

4. Ray. Tackley, Weston.

5. Isis. Finstock, Sarsden.

6. Thame. Littlemore.

A taller shrub with larger flowers and fruit than the preceding species,
the flowers appearing with the leaves, the anthers also are larger and
redder in colour.

SPIRÆA. L.

S. ulmaria, L. *Meadow-Sweet.*

Top. Bot. 129. Syme, E. B. iii. 126. 415. Nym. 215.

Native. Pratal and paludal. Moist meadows, ditch-sides. Common, and generally distributed, except on the Chilterns. P. June-Sept.

First record, *Sib.* 1794.

About Oxford with *Leptostroma Spirææ*, Fr. Bz. Very abundant in the Ifley and Marston Meadows. The plant with white undersurface to the leaves is the prevailing form, but this character does not appear to be constant.

S. filipendula, L. *Dropwort.*

Top. Bot. 129. Syme, E. B. iii. 128. Nym. 215. Bz. 133.

Native. Pascual. Dry pastures, downs, roadsides. Local, but widely distributed. P. June-Aug.

First record, *Filipendula vulgaris*, Ger. Wychwood plentifully, *Blackstone MSS.* 1737.

2. Ouse. Mixbury! R. C. Pryor. Near Ardley.

3. Swere. Near Shutford, Gull! Bretch, Tadmarton, Hanwell, Bees. Camp near Shipton, A. Fr. Near Wroxton, Miss Rusher. Somerton Meadows, near Deddington.

4. Ray. Headington Wick Copse, in pastures adjoining, plentiful in Stow Wood, between Oddington and Grange, Bz. Drier parts of Kirtlington Park, and in the green lane, W. W. Saunders. Roadside between Middleton Stoney and Fritwell, A. Fr. Upper Heyford, Rev. E. Fox. Blackthorn, H. Bos. Beckley, near Elsfield, rail-side near Kirtlington.

5. Isis. Burford Downs, canalbanks going to Wolvercote, *Sib.* Wychwood, *Blackstone!* also in *Spec. Bot.* and *Gough.* Blenheim, Rogers. Hunting bridge, Cornbury, J. M. Albright. Abundant on Lyneham Camp, Tainton Quarries, Brize Norton.

6. Thame. Bullingdon Green, Bz. in *Walk.* Nuneham, Rev. R. Linton. Open Magdalen, T. Thurland. Oxford border of Hell Copse, A. Fr. Thame Park, Hb. Bz. Dorchester dykes, Rev. F. Bennett. Shotover.

7. Thames. Henley, H. B. in *Phyt.* vi. n. s. 314. Swincombe Down, H. Bos. Peppard in turf, F. A. Lees. Goring, Grime's Dyke, Mongewell Wood, Widley Wood, Crowell.

Berks. Bessilsleigh, Blewbury, Ilsley, and Radley Common, H. Bos. Streatley.

RUBUS. L.

R. idæus, L. *Wild Raspberry.*

Syme, E. B. iii. 168. 442. Nym. 215.

Native. Ericetal and sylvestral. Heaths and coppices, on sandy or gravelly soil. Widely distributed and locally abundant. Absent for three miles round Oxford, but plentiful on Boar's Hill, and less frequently so on Shotover. Shrub. June, July.

First record, *Plot*. 1677, who says it is plentiful on the Chilterns. See also Ray 3rd edit. and Hudson's *Flora Anglica*. With variegated leaves, near Cookley Green.

Var *B. Leesii*, Bab. Syme, E. B. iii. 161. 453.

7. Thames. Woods above Shirburn. It is given in Student's Flora for Oxon instead of Berks, where Mr. Dyer saw it; see below.

Berks. Boar's Hill, *W. T. Dyer, Hb. Br. Mus.* 1867.

Warwick near Woodloes.

***R. fruticosus*, L. Blackberry.**

Aggregate. Native. Septal, etc. Woods, hedges, and waste places. Generally distributed. Sh. June-Sept.

First record, between Finstock and Fawler with striped foliage, 1677, *Plot*. A variety with white fruit, *R. leucocarpus*, 'found accidentally in a hedge near Oxford,' *D. Bobart*, in Ray, ed. ii. 1696.

***R. suberectus*, And.**

Syme, E. B. iii. 164. 444.

Native. Heathy Woods. Rare or overlooked. July, Aug.

I believe this occurs on Shotover Hill on the north side, but the plant had no panicle, so doubt attaches to the occurrence of this species in Oxon.

Berks. Snelsmore, Newbury, *Brit.* Warwick.

***R. Lindleianus*, Lees. Nym. 216.**

Native. In hedges and on upland heaths. Local. July, Aug.

1. Stour. Tadmarton, '*nitidus*;' Bell Salt, now W. and N., *Beesley*.

4. Ray. Headington Wick.

6. Thame. Shotover.

7. Thames. Nuffield.

Berks. Snelsmore, *Brit.* Tubney, Warwick, Northants.

***R. ramosus*, Blox.**

Native. Heathy ground. Rare. July, Aug.

6. Thame. Shotover.

***R. rhamnifolius*, W. and N.**

Nym. 216. Syme, E. B. iii. 169. 446.

Native. Thickets, commons, and heathy ground. Widely distributed and locally common. July-Sept.

First record, *Mr. Bicheno* in *Sm. Eng. Fl.* 1824. Abundant in woods about Tangley.

1. **Stour.** Sibford Heath.
 2. **Ouse.** Hardwick and Hethe.
 3. **Swere.** Hardwick Road, *A. Fr.* Tadmarton.
 4. **Ray.** Headington Wick, with var. *cordifolius*, Blox., see *Rep. of Rec. Club*, 1880, p. 144.
 5. **Isis.** Tangle, *Mr. Bicheno.* Bruern Wood.
 6. **Thame.** Shotover Hill, see *Rep. of Rec. Club*, 1880. Shotover to Horspath.
 7. **Thames.** Chinnor Common, Aston Wood, Hailey Wood, Mongewell Woodcote, Ipsden.
- Berks.** Boar's Hill, Tubney. **Bucks.** Napford. **Northants.** Harleston, etc. **Gloucester,** **Warwick.**

The fruits of *Rhamnifolius* are more acid than those of *discolor* or *leucostachys*.

R. discolor, W. and N. Common Bramble.

Syme, E. B. iii. 170. 447. Nym. 217.

Native. In hedges and thickets. Abundant. The common form on Clay and Oolite. July–Sept.

Near Sibford in the Stour district occurs a form which Mr. Bagnall says is very near *argenteus*.

R. thyrsoides, Wimm.

Nym. 216. Syme, E. B. iii. 172.

Native. Hedges and thickets. Local. July, Aug.

First record, *the Author*, 1880.

1. **Stour.** Sibford.
3. **Swere.** Swalecliff.
4. **Ray.** Headington Wick.
5. **Isis.** Bruern Wood.
6. **Thame.** Shotover.
7. **Thames.** Mongewell, Nettlebed, Cowleaze Wood.

Berks. Wootton. **Bucks.** Napford. **Northants.** Moulton. **Gloster,** **Warwick.**

R. leucostachys, Sm.

Nym. 218. Syme, E. B. iii. 173. 448.

Native. Hedges and heathy places. Common. July–Sept.

First record, *the Author*, see *Rep. of Rec. Club*, 1880.

1. **Stour.** Sibford.
2. **Ouse.** Hethe.
3. **Swere.** Epwell, Shutford, Cropredy.
4. **Ray.** Stow Wood, Headington Wick, with an abnormal form.
5. **Isis.** North Leigh.
6. **Thame.** Shotover, *Rep. of Rec. Club*, 1880. **Dorchester.**
7. **Thames.** Crowsley Park side, Crowell Wood, Nuffield Wood. Crowell Wood, *Rep. of Rec. Club*, 1883. Woodcote, Chinnor, etc.

Berks. Boar's Hill, Wytham. Bucks, Fawley. Northants, Gloster, Oddington. Warwick.

Var. *R. vestitus*, Weihe.

6. Thame. Shotover.

7. Thames. Hailey Wood, Sunley Wood, etc.

***R. Salteri*, Bab.** Nym. 218. *R. sylvaticus*, W. and N.

Native. Heathy places. Very rare. July, Aug.

First record, *the Author*, 1884.

6. Thame. Shotover.

Var. *R. calvatus*, Blox.

5. Isis. Bruern Wood.

Gloster, Warwick.

***R. carpinifolius*, W. and W.**

Native. Heathy places. Rare. Aug., Sept.

First record, *the Author*, 1885.

6. Thame. North side of Shotover.

Gloster, Warwick.

***R. villicaulis*, Koehl. in W. and N.** Nym. 217.

Native. Woods and hedges. Local. July, Aug.

First record, *the Author*, 1881.

4. Ray. Headington Wick.

7. Thames. Chinnor Hill, Aston Wood.

Berks. Wargrave, *Melville*. Gloster, Warwick.

***R. macrophyllus*, W.**

Syme, E. B. iii. 177. 450. Nym. 217.

Native. Woods and heaths, not uncommon. July–Sept.

First record, *the Author*, 1881.

Var. *a. umbrosus*, Arr.

6. Thame. Shotover, and also an extreme form.

Var. *b. macrophyllus*, W. and N.

7. Thames. Aston Wood.

Var. *c. Schlechtendalii*, W. and N.

4. Ray. Headington Wick.

Var. *d. amplificatus*, Lees.

4. Ray. Headington Wick copse.

6. Thame. Shotover, Gt. Haseley.

7. Thames. Goring.

Berks. Boar's Hill, *Rep. of Rec. Club*, 1880. Bucks, Napford. Northants, Harleston. Warwick.

***E. mucronulatus*, Bor.**

Nym. 220. Syme, E. B. iii. 178. 451.

Native. Heathy places. Rare. July, Aug.

First record, *T. Beesley*, 1850.

3. Swere. Hanwell Heath *mucronatus*, *T. Bees*.

Warwick.

***E. hystrix*, Weihe. Nym. 220.**

Native. Sandy commons, hedges. Rare. July, Aug.

First record, *T. Beesley*, 1850.

3. Swere. Broughton, *T. Bees*.

7. Thames. Nuffield common.

Gloster, Warwick.

***E. scaber*, W. Nym. 219.**

Native. Woods, heaths. Rare. July, Aug.

First record, *the Author*, 1884.

6. Thame. Shotover.

7. Thames. Crowell Hill.

Gloster, Warwick.

***E. rudis*, Weihe.**

Nym. 219. Syme, E. B. iii. 183.

Native. Sandy soil, hedges, heaths. Locally common. July-Sept.

First record, *A. French*, 1876.

1. Stour. Tadmorton Heath, Sibford a lacinate form.

2. Ouse. Shelswell, Hardwick.

3. Swere. Great Tew, *A. Fr.*, 1876. Swalecliffe.

4. Ray. Headington Wick.

5. Isis. Bruern Wood.

6. Thame. Shotover, see *Rep. of Rec. Club*, 1880, 1883.

7. Thames. Common Nettlebed, Goring, Crowell, Nuffield, Chinnor, Cowleaze Wood, etc.

Berks. Boar's Hill, Tubney. Bucks, Northants, Gloster, Warwick.

***E. praeruptorum*, Boul.**

Native. Heathy places. Very rare. July, Aug.

6. Thame. Shotover Hill, see *Rep. of Rec. Club*, 1881.

***E. radula*, Weihe.**

Nym. 219. Syme, E. B. iii. 184. 452.

Native. Heaths, hedges on dry soil. Local. July-Aug.

First record, *T. Beesley*, 1850.

1. Stour. Sibford Ferris.

3. Swere. Hardwick Hill, *T. Bees*. Swalecliffe, Cropredy.

5. Isis. Bruern Wood.

6. Thame. Shotover, and var. *denticulatus*.
 7. Thames. Nettlebed, Aston Wood, Goring, Chinnor.
 Berks. Frilford. Bucks, Napford. Northants, Harleston. Warwick.

B. Koehleri, Weihe.

Nym. 220. Syme, E. B. iii. 185. 453.

Native. Woods, hedges. Common on sandy soil. July–Sept.
 First record, R. French, 1870.

1. Stour. Tadmarton.
2. Ouse. Mixbury.
3. Swere. Hardwick Hill, R. French. Shutford, Cropredy.
4. Bay. Headington Wick.
5. Isis. Bruern Wood.
6. Thame. Shotover.
7. Thames. Aston Wood, Nettlebed, Woodcote Common, Nuffield,
 Checkenden, Binfield, Stoke Row, etc.

Berks. Boar's Hill.

Var. *b. infestus*, Bab. Rather rare.

1. Stour. Tadmarton.
 7. Thames. Nettlebed, Nuffield.
- Berks. Bagley, Tubney. Gloster, Warwick.

Var. *c. pallidus*, Weihe. Not uncommon.

4. Ray. Headington Wick.
 6. Thame. Shotover.
 7. Thames. Aston Wood, see *Rep. of Rec. Club*, 1883. Goring.
- Berks. Boar's Hill, Bagley. Bucks, Napford. Northants, Gloster,
 Warwick.

B. Bloxamii, Lees. Nym. 219.

Native. Woods and hedges. Rare. July–Sept.

First record, *the Author*, 1883.

6. Thame. Shotover.
7. Thames. Stokenchurch Wood, *Rep. of Rec. Club*, 1883.
 Warwick.

B. diversifolius, Lindl. Nym. 221.

Native. Hedges. Local. July, Aug.

First record, T. Beesley, 1850.

2. Ouse. Mixbury.
3. Swere. In a hedge near the 'Bear' Garden, now cut down, T. Bees.
 Near Cropredy, Broughton.
5. Isis. Bruern.

B. fusco-ater, Weihe. Nym. 220.

Native. Hedges. Rare. July, Aug.

First record, T. Beesley, 1850.

3. Swere. Banbury hedges common, *T. Bees*. 1850.
Gloster, Warwick.

E. Guntheri, Weihe. Nym. 220.

Native. Heathy ground. Rare. July, Aug.
First record, *the Author*, 1884.

6. Thame. Shotover, not typical, 1884.

7. Thames. Watlington Woods.

Gloster, Warwick.

[*R. foliosus, Weihe.* Nym. 219.

Northants, Warwick.]

E. glandulosus, Bell.

Native. Woods. Rare. July, Aug.

First record, *the Author*, 1884.

6. Thame. Shotover.

Berks. Newbury, *Mr. Bicheno*. Gloster, Warwick.

E. Balfourianus, Blox.

Nym. 221. Syme, E. B. iii. 192.

Native. Hedges. Local. July, Aug.

First record, *A. French*, 1876.

3. Swere. Neithrop House grounds, *A. Fr.*, 1876. Shutford, Broughton,
Swalecliffe.

4. Ray. Headington.

7. Thames. Cowleaze Wood.

Berks. Sheen, *Bicheno*. Bagley. Gloster, Warwick.

E. corylifolius, Sm.

Nym. 221. Syme, E. B. iii. 192. 455.

Native. Hedges. Common and generally distributed. June-Sept.

First record, *A. French*, 1876.

Var. *a. sublustris*, Lees.

4. Ray. Kirtlington, Headington Wick with erect sepals.

5. Isis. Wolvercote.

6. Thame. Cowley Marsh, see *Rep. of Rec. Club*, 1880. Shotover
with clasping sepals.

7. Thames. Cookley Green.

Var. *b. conjungens*, Bab.

1. Stour. Sibford.

3. Swere. Tadmarton, Broughton.

4. Ray. Otmoor, Headington Wick.

Thame. Oxford road, one or two miles from Thame, *A. Fr.*

Var. *c. purpureus*, Bab.

3. Swere. Between Barford and Milton.

E. tuberculatus, *Bab.* Syme, E. B. iii. 194.

Native. Hedges. Local. July, Aug.

First record, *T. Beesley*, 1850.

1. **Stour.** About Sibford Ferris.

3. **Swere.** Between Banbury and Twyford, *A. Fr.* Common, *T. Bees.*
dumetorum. Tadmarton, Broughton.

4. **Ray.** Summertown, Marston.

6. **Thame.** Shotover, also a form between this and next species.

E. althaeifolius, *Hort.*

Native. Hedges. Local.

First record, *the Author*, 1885.

3. **Swere.** Between Banbury and Broughton.

E. caesus, *L.* *Dewberry.*

Syme, E. B. iii. 195. 456.

Native. Woods and ditches. Locally common and widely distributed,
occurs in all the districts. June, July.

First record, *Sib.* 1794.

Var *R. ulmifolius*, *Presl.*

Menmarsh Farm, *A. Fr.*

Var. *agrestis*, *Bab.*

Great Haseley.

[*R. saxatilis*, *L.* Gloster E. and W.]

* *R. laciniatus*, *Will.*

Alien. Tadmarton.

An extensive patch apparently planted in a fox cover, and flowering abundantly on the dry sterile sandy soil. The place shows signs of cultivation; a double flowered variety of *Narcissus Pseudo narcissus* growing near it, *A. Fr.*

FRAGARIA. *L.*

* **F. elatior**, *Ehrh.* *Hautboy Strawberry.*

Alien. Comp. Cyb. 501. Syme, E. B. iii. 156. 439.

5. **Isis.** Between North Leigh and Handborough! near Woodcote!

6. **Thame.** Shotover, 1885.

7. **Thames.** Chalk-pit near Caversham, *A. Fr.* This is I believe not
elatior but *F. Chilensis*.

F. vesca, *L.* *Wild Strawberry.*

Top. Bot. 135. Syme, E. B. iii. 154. 438. Nym. 222. Bx. 242.

Native. Sylvestral. Woods and hedgebanks, generally distributed.

P. May, June.

First record, *Sib.* 1794.

Observed on Shotover with *Uredo Potentillarum*.

A much larger form is found on the chalk, as near Crowsley Park. A form with four petals was noticed on Ipsden Heath.

Comarum palustre, L. Syme, E. B. iii. 153. 437.

Berks. Heath Pool, Wellington, boggy meadows Kintbury, *Brit.*
Bucks (!), Northants, almost or quite extinct. Warwick.

POTENTILLA. L.

** *P. fruticosa*, L. Alien, a planted shrub found near Great Tew by Mr. James Rusher. I have seen the specimen, and am informed it was apparently wild, *Bees*. One bush in the Avenue, Great Tew, *A. Fr.*

P. anserina, L. *Silvery Cinquefoil. Silver Weed.*

Top. Bot. 132. Syme, E. B. iii. 148. 432. Nym. 223.

Native. Glareal. Waysides, damp places. Rather common. P. June-Aug.

First record, *Sib.* 1794.

Generally distributed. Two forms occur, one with upper surface of leaves green, the other covered with silky hairs.

P. argentea, L.

Top. Bot. 132. Syme, E. B. iii. 151. 435. Nym. 224.

Native. Glareal. Dry elevated pastures. Very rare and probably extinct. P. June.

First and only record, *Sib.* 1794. Henley Park Hill.

Berks. Near Bessilsleigh in the fields towards Abingdon, *Britt.* Bucks, Warwick.

P. reptans, L. *Common Cinquefoil.*

Top. Bot. 133. Syme, E. B. iii. 149. 432. Nym. 226.

Native. Viatical. Hedges and roadsides, cornfields, etc. Common and generally distributed. P. June-Sept.

First record, *Sib.* 1794, p. 161.

It occurs on the south side of the Ifley Road, close to the Cricket Ground, by the Parks, and in other places about Oxford. The leaflets vary from three to seven in number.

Var. *mixta*, Nolte. Open Magdalen.

P. procumbens, *Sib.* *Tormentilla reptans*, L.

Top. Bot. 133. Syme, E. B. iii. 147. 431. Nym. 226.

Native. Sylvestral. Woods, field borders, etc. P. July-Sept.

First record, *Plot*, 1677, and first as a British plant, *Pentaphyllum reptans alatum foliis profundis serratis*, also in *Mortson*, *Ray* i, ii, and iii, *Martyn*, *Gough*, *Ray's Hist.*, *Bot. Guide*, *Sm. Eng. Fl.* Several parts of Oxfordshire.

3. *Swere*. Hooknorton Heath, Wiggington Heath. My specimens seem quite distinct from *P. reptans* *Gull*.

4. **Ray.** Tackley Heath, fields south of Stow Wood.
 5. **Isis.** Bruern Wood.
 6. **Thame.** Between Hookley and Woods under Shotover, *Plot.* Open Magdalen.
 7. **Thames.** Woodcote Common, common near Clump House.
- Berks.** Bagley Wood. Bucks, Brickhill. Northants, Silverston. Gloster, Oddington. Warwick.

P. tormentilla, Scop. *Tormentil.*

Top. Bot. 133. Syme, E. B. iii. 144. 430. Nym. 227. Baxt. 341.
Native. Ericetal, pascual. Heaths, dry pastures. Locally common.

P. June-Sept.

First record, *Wm. Coles* in *Adam in Eden*, 1657.

1. **Stour.** Tadmarton Heath, *Bees.*
 2. **Ouse.** Stoke Lyne, *E. Fry, Esq.*
 3. **Swere.** Adderbury, Hooknorton Heath, *Gull.* Bretch, Hanwell, *Bees.* Wroxton Park, *O. V. Alpin.* Epwell, Somerton.
 4. **Ray.** Summertown, *Hb. R. Linton.* In a close that lyeth between the Wick and Strafford Lane, near Headington, where the biggest roots that ever I saw grow, *Wm. Coles.* Kirtlington, Stow Wood, Tackley Heath, Upper Heyford railside, near Bicester.
 5. **Isis.** North Leigh Heath, Finstock Heath.
 6. **Thame.** Bate's Leys, *Hb. Bx.* Shotover, Nuneham, railside Wheatley.
 7. **Thames.** Nettlebed, *A. Fr.* Stoke Row, Woodcote, Mongewell, Nuffield, Binfield, Chinnor, Ibstone, Penley Wood, Stokenchurch, Binfield, Chanse Heath, Ipsden Heath, etc., etc.
- Berks.** Boar's Hill, Bagley Wood, Frilford, Tubney, Ilsley.

P. fragariastrum, Ehrh. *Barren Strawberry.*

Top. Bot. 134. Syme, E. B. iii. 143. 427. Nym. 228.

Native. Sylvestral. Woods, hedgebanks, etc. Common and generally distributed. P. Feb.-Nov.

First record, *Sib.* 1794. *Fragaria sterilis*, L.

On Shotover with *Puccinia Potentillæ*, Grev. and *Uredo Potentillæ*, D C. Bx.

GEUM. L.

G. urbanum, L. *Avens.*

Top. Bot. 130. Syme, E. B. iii. 197. 457. Nym. 230.

Native. Septal and sylvestral. Woods, thickets, and hedges. Common and generally distributed. P. May-Aug.

First record, *Sib.* 1794.

On Shotover with six and seven petals.

G. intermedium, Ehrh.

Top. Bot. 130. Syme, E. B. iii. 199. 458. Nym. 230.

G. urbano-rivale, Rch. Native. Woods. Local and rare. P. May-July.

First record, *Jour. Bot.* ix., W. T. Dyer, Elsfield Copse.

4. Ray. Elsfield Copse as above; Beckley Wood; Noke. *Report of Rec. Club since 1880.*

This is a hybrid of *urbanum* and *rivale*, the *urbanum* parentage rather predominating; with this grows *G. intermedium*, W., *G. rivali urbanum*, Rch., with drooping flowers and brown calyx, a hybrid nearer *rivale*, and several forms receding from or approaching to it; some of these are fertile.

Warwick rare.

G. rivale, L. Water Avena.

Top. Bot. 131. Syme, E. B. iii. 200. 459. Nym. 230. Bx. 3.

Native. Sylvestral and pratal. Woods, meadows, and canalsides. Local, confined to the Ray district. P. May-July.

First record, *Sib.* 1794, p. 163.

4. Ray. Marston! Noke! *Sib.* Calves Close Headington, Elsfield Copse, *R. Walker*. Cherwell near Thrupp, *H. Bos.* In Oldbury near the spring, and in a meadow near the Oxford Canal at south-west extremity of Kirtlington parish, in the latter place specimens are more luxuriant, *W. Wilson Saunders*. Between Kirtlington and Upper Heyford, *Rev. E. Fox*! Meadows between Noke and Beckley, Beckley Wood, meadows bordering Weston Peat Pits, railside between Upper Heyford and Somerton.

Berks. Hungerford, Northcroft, Kintbury near Newbury, *Brit. Warwick.*

ROSA. L.

R. arvensis, Huds.

Top. Bot. 153. Syme, E. B. iii. 231. 476. Nym. 231. Bx. 325.

Native. Septal. Woods, hedges, etc. Common. Shrub. June-July.

First record, *Sib.* 1794.

1. Stour. Tadmarton, *Sibford*.

2. Ouse. Mixbury, Ardley, Hethe, etc.

3. Swere. 'Not common near Banbury, but a mile or two from it in several directions becomes very frequent, sometimes more so than *canina*,' *Bees*. Common. A variety in the Avenue, Great Tew, with elongated peduncles, entire sepals, and thickly glandular, *A. Fr.* Somerton, Bloxham, etc.

4. Ray. Headington Wick, *H. Bos.* Stow Wood, *Sib.* Marston, Oddington, etc.

5. Isis. Tar Wood, *Sib.* Between Canal and Woodstock Road, about a mile from Oxford, with hispid fruit, *Bz.* Wychwood, Bladon, Bruern.

6. Thame. Copse under Shotover Hill, *Sib.* Iffley, Dorchester, Albury, Tetsworth, etc.

7. Thames. Stokenchurch, *Hb. Bz.* Mongewell, Stoke Row, etc.

Berks. Bagley, *H. Bos.* Wytham, Boar's Hill, Tubney, Abingdon, etc.

***E. bibracteata*, Bast.** Nym. sp. 231.

Native. Septal. Hedges and wood borders. Rare. June, July.

First record, *the Author, Rep. of Rec. Club*, 1883.

4. Ray. Noke, Horton-cum-Studley.

7. Thames. Checkendon Wood.

***E. stylosa*, D.**

Comp. Cyb. 164. Nym. 231.

Native. Septal. Thickets. Very rare. Sh. June, July.

First record, *A. French*, 1870.

3. Swere. In thickets at Bloxham, *A. Fr.*

Var. *E. systyla*, Bast.

3. Swere. Hedge by Bloxham Road, *Bees*.

7. Thames. Kingston Hill, *Hb. Bz.*

Berks. Donington Castle, *J. Bickeno in Walk.* Gloster, Warwick
gallicoides, which is probably not a *systyla* form.

***E. involuta*, Sm.** E. B. 2068.

Native. Hedges. Very rare. Sh. June.

3. Swere. Milton Lane, *T. Bees*.

A plant which I believe is the var. *Sabini* occurred in a barren state near Ipsden Heath. Northants, Gloster, Warwick, Berks.

***E. mollissima*, W.**

R. mollis, Sm. *R. villosa*, L.

Syme, E. B. iii. 208. 466. Nym. 222.

Native. Septal. Hedges on sandy or gravelly soil. Rather rare. Shrub. June, July.

First record, *Dillenius*, about 1730, 'towards Postcombe near Oxford, where it grows in y^e woods and hedges plentifully,' *Hb. Dill.*, 4542.

3. Swere. Broughton, near the mill, *A. Fr.* Between Milton and Barford. Var. *cerulea*, *A. Fr. in Hb. Br. Mus. Dr. Lees* (see *Rep. of Rec. Club*, 1884) thought this to be a form of *tomentosa*.

4. Ray. Marston, Headington Copse, *Hb. Sherard*, but specimens put in by some later collector, probably *Dr. Williams*. Begbroke and Stratfield Brake, *H. Bos.*

5. Isis. Woodstock, *H. Bos.* Bladon; Bampton; near Tadpole Bridge, near Clanfield.

6. Thame. Postcombe, *Hb. Dill.* Cheney Lane, *Hb. Sherard*, see above. Dorchester, see *Rep. of Rec. Club*, 1881.

7. **Thames.** Watlington, near Christmas Common, Nettlebed, Checkendon.

Berks. Dean Court, *H. Bos.* Tubney, Bagley Wood, Foxcombe Hill, Bessilsleigh, Cotham. *Gloster*, Lechlade. *Northants.* Warwick.

R. tomentosa, Sm.

Top. Bot. 150. Syme, E. B. iii. 209. 467. Nym. 232.

Native. Septal. Hedges, etc. Rather uncommon. Shrub. June, July. First record, *Sib.* 1794.

3. **Swere.** Broughton Mill, *E. Walford*. Great Tew, *O. V. Aplin*, frequent, *T. Bees*. Newington Paper Mills, near Bodicote, etc.

4. **Ray.** Between the end of Marston Lane and Headington Copse a rose is found styled by Mr. Sabine *R. tomentosa-Oxoniensis*: it is larger than the common *tomentosa*, with larger and more pointed leaflets, more glandular, but less downy, the fruit more hispid, *Bz. in Walk.* Marston Lane, *Sabine in Hb. Br. Mus.* Type in *Hb. Sherard* from Marston Lane. Marston Lane 'villosa,' *Sib.*

5. **Isis.** Woodstock Road, a variety with the upper surface of the leaflets smooth, probably *var. b.* of *Wood's Roses* in *Trans. Linn. Soc.*, vol. xii. p. 200. Near the old wall by the side of the footpath going through Pinsley Wood near Church Handborough, *Bz. MSS.* Yarnton, *H. Bos.* Bampton, Kelmscott.

6. **Thame.** Cheney Lane, *Bz. MSS.* Bullingdon, *H. Bos.* Near Shotover, Dorchester.

7. **Thames.** Lewknor.

Berks. Copse between Childswell Farm and Cumnor Hurst, *Bz. MSS.* Bagley Wood.

Var. *scabriuscula*, Sm.

4. **Ray.** Between Charlton and Fencott in two places, *Rev. Moyle Rogers*.

7. **Thames.** Mongewell.

Var. *subglobosa*, Sm. *R. Sherardi*, Dav.

2. **Ouse.** Mixbury.

4. **Ray.** Marston.

6. **Thame.** Bullingdon.

7. **Thames.** Mongewell and Nuffield, see *Rep. of Rec. Club*, 1881.

Var. *fatida*, Bast.

7. **Thames.** Lewknor, see *Rep. of Rec. Club*, 1883.

R. rubiginosa, L. *Sweet Briar*.

Top. Bot. 151. Syme, E. B. iii. 210. 468. Nym. 233.

Native. Septal. Hedges. Rather rare. Sh. June, July.

First record, *Sib.* 1794.

3. **Swere.** Crouch Lane, rare, *A. Bees*.

4. **Ray.** Headington Wick Copse, *H. Bos.* Elsfield.

5. **Isis.** Wychwood, *Sib.* Ditchley, Wootton.

6. **Thame.** Clifton, *Sib.* Shotover, *Bx. MSS.*
 7. **Thames.** Henley Park Hill, *Sib.* Hartlock Wood, near Dysons Wood, Binfield, *Rep. of Rec. Club*, 1881.

Berks. Bagley Wood! *Bx. MSS.* Unwell Wood.

***E. micrantha*, Sm.**

- Top. Bot. 151. Syme, E. B. iii. 211. 469. Nym. 231.
 Native. Septal. Hedges and thickets. Sh. July, Aug.
 First record, *Boswell*, 1860.
 3. **Swere.** Bloxham Road, *A. Fr.* Crouch Lane, *T. Bees.*
 5. **Isis.** North Leigh.
 6. **Thame.** Shotover, *H. Bos. in Phyt.* iv. n. s. p. 100. Magdalen Copse, *H. Bos.*
 7. **Thames.** Mongewell, Nettlebed.
Berks. Bagley! Birch Copse, *H. Bos.*
 Var. *Briggsii*, Baker.
 8. **Swere.** Crouch Lane, *A. Fr.* I have not seen specimen.
 Var. *hystrix*, Leman.
 7. **Thames.** Caversham, *W. Borrer.* First record as British in *Journ. Linn. Soc.*, vol. xi. 222.

***E. septum*, Thuil.**

- Syme, E. B. iii. 212. 470. Nym. 233.
 Native. Septal. Hedges. Shrub. Probably extinct.
 First record, *W. Baxter* in *Walker's Flora*, 1834.
 4. **Ray.** On the Leys, about a mile E. by N. from Upper Heyford, *Bx.* ('a remarkable variety in Marston Lane, near Oxford, with doubly compound leaves, *Mr. Sabine.*' Given under this species in *Walker's Flora*, refers not to this species, but to a variety of *canina*. It was found in Marston Lane, a little beyond the road going to King's Mill. The plant is now lost.)
 Warwick.

***E. canina*, L.** Dog Rose.

- Top. Bot. 152. Syme, E. B. iii. 215-226. 472. Nym. 234. 5.
 Aggregate. Native. Septal. Hedges, etc. Common and generally distributed. Shrub. May, June.

First record, *Sib.* 1794.

Baxter noticed *Puccinia Rosæ*, Grev., *Uredo Rosæ*, Grev., *U. effusa*, Mid., *Erysiphe pannosa*, Link., on this species about Oxford. In *Walker's Flora Rosa sarmentacea*, E. B. 2595, *R. Forsteri*, E. B., and *R. Borreri*, E. B., are included, but no localities are given.

R. lutetiana, Leman. Syme, E. B. iii. 226.

1. **Stour.** Tadmarton.
2. **Ouse.** Mixbury.

3. Swere. Banbury, *A. Fr.* Thutford, Newington, etc.
 4. Ray. Marston, Oddington, the common form about Heyford.
 5. Isis. Woodstock, Eynsham.
 6. Thame. Albury.
 7. Thames. Nettlebed, *A. Fr.* Caversham, *Hb. Br. Mus. Col. H. Trimen*, 1866. Common on the Chalk.
- Berks. Frilford, Bagley.

R. surculosa, Woods.

7. Thames. Nettlebed, not typical, flowers few, leaves not rounded at base, *A. Fr.* ? Is it *surculosa*.
- R. sphaerica*, Gren.
4. Ray. Marston, *Druce*, see *Rep. of Record Club*, 1881. Two or three large bushes near Merton, *Rev. W. Moyle Rogers*. Tackley.
 5. Isis. Near Wychwood.
 6. Thame. Dorchester.
 7. Thames. Stoke Row.

R. senticosa, Ach.

4. Ray. Near Islip.
- R. dumalis*, Bechst. Syme, E. B. iii. 225. *R. sarmentacea*, Sm.
1. Stour. Sibford.
 3. Swere. Between Adderbury and Banbury. *A. Fr.* Bloxham.
 4. Ray. Between Islip and Beckley, about Oxford, not uncommon, *Bz. MSS.*
 5. Isis. Near Godstow, *W. T. Dyer*, in *Brit. Cont. to Berks Flora*. Ditchley, Bruern, Bampton.
 6. Thame. Shotover, Dorchester.
 7. Thames. Ipsden, Mongewell.
- Berks. Bagley, Marcham.

R. biserrata, Merat. *R. vinacea*, Baker.

2. Ouse. Mixbury.
 3. Swere. Clattercut.
 4. Ray. Fencott, *Rev. W. Moyle Rogers*. Marston.
- R. urtica* Lem. Syme, E. B. iii. 225. *R. Forsteri*, Sm.
Generally distributed.

R. platyphylla, Rau.

5. Isis. Near Bampton.
- R. frondosa*, Stev.
2. Ouse. Near Mixbury.
 3. Swere. Between Adderbury and Banbury, 1876, *A. Fr.*
- R. arvensis*, Baker. Syme, E. B. iii. 217.
3. Swere. Penhill, 'inodora,' *T. Bees*.
 4. Ray. Charlton, Islip, *Rev. W. Moyle Rogers*. Oddington.

5. Isis. Godstow, *sub nom.* *R. inodora*, col. H. Boswell in *Hb. Br. Mus.*

6. Thame. On Oxford Road, one or two miles from Thame, *A. Fr.*

7. Thames. Goring, *Druce*, see *Rep. of Rec. Club*, 1880.

Berks. Marcham.

R. dumetorum, Thuil. Syme, E. B. iii. 223.

3. Swere. Bloxham.

4. Ray. Marston Lane! *Bx. MSS.* Otmoor, *Druce*, see *Rep. of Rec. Club*, 1883. Oddington, rather common.

5. Isis. Handborough.

6. Thame. Wheatley, Horspath, Tetsworth.

7. Thames. Woodcote.

R. pruinosa, Baker.

2. Ouse. Near Mixbury.

R. tomentella, Lem. Syme, E. B. iii. 217.

1. Stour. Sibford.

2. Ouse. Mixbury, Hardwick.

3. Swere. Epswell.

4. Ray. Otmoor, *Druce*, see *Rep. of Rec. Club*, 1881. Stow Wood.

5. Isis. Near Godstow, *W. T. Dyer*, in *Brit. Cont. to Berks Flora*.

6. Thame. Bullingdon, *Rep. of Rec. Club*, 1880. Albury.

7. Thames. Mongewell.

Berks. Cumnor, *Rep. of Rec. Club*, 1881.

R. obtusifolia, Desv. *R. inodora*, Hook.

4. Ray. Near Beckley.

R. andegavensis, Bast. Syme, E. B. iii. 219.

3. Swere. Between Adderbury and Banbury, *A. Fr.*

4. Ray. Beckley, *Druce*, see *Rep. of Rec. Club*, 1880.

6. Thame. Shotover, near Wheatley.

R. verticillacantha, Merat.

4. Ray. Marston Lane.

6. Thame. Wheatley.

Berks. Wittenham, see *Rep. of Rec. Club*, 1881.

R. latebrosa, Deseg.

4. Ray. Charlton, Fencott, Islip, *Rev. W. Moyle Rogers*.

5. Thame. Tetsworth, *Druce*, see *Rep. of Rec. Club*, 1883.

R. aspernata, Deseg.

4. Ray. Charlton, *Rev. W. Moyle Rogers*.

7. Thames. Near Goring, *Druce*, see *Rep. of Rec. Club*, 1880.

R. Kosinciana, Bess.

5. Isis. Road between Stonesfield and Charlbury, *Druce*, see *Rep. of Rec. Club*, 1880.

6. Thame. Wheatley, see *Rep. of Rec. Club*, 1881.

R. caesia, Sm.

2. Ouse. Near Mixbury.
5. Isis. Near Leafield, *A. Fr.*
- Berks. Wokingham, *Brit.*

R. decipiens, Dumort.

4. Ray. Charlton, *Rev. W. Moyle Rogers.*
- R. Reuteri*, Godet.
3. Swere. Wykeham, *A. Fr.* Tadmarton.
4. Ray. Marston.
6. Thame. Near Albury.

Berks. Hedge by Tubney Wood, see *Rep. of Rec. Club*, 1881.

R. subcristata, Baker.

6. Thame. Near Albury, *Rep. of Rec. Club*, 1881.

R. Watsoni, Bak.

4. Ray. Between Charlton and Wendlebury.

R. implexa, Gren.

4. Ray. Between Marston and Wood Eaton.

R. coriifolia, Fr. *R. bractescens*, Woods.

4. Ray. Marston fields.
5. Isis. Near Woodstock Road Station, not typical, leaves rather downy.
6. Thame. Near Albury.

R. Bakeri, Deseg.

3. Swere. Near the Fulling Mill, 1859, *T. Bees.*

** *R. Cinnamomea*, *L.*

Alien.

Var. flore pleno, at bottom of peat bog on Bullingdon Green, where it may undoubtedly be considered naturalized, there being four or five large plants, which, from their appearance, must have been growing there a number of years. There is no house within a quarter of a mile of the place, *Bx.* The extraordinary fact of a double variety being found so far from a house has induced me to insert it in this work, *Purton, add.*, p. 47.

R. spinosissima, *L.* *Burnet Rose.*

Syme, E. B. iii. 203. 461. Nym. 237.

Native. Glareal, ericetal. Heaths, etc. Very rare. Shrub. June.

4. Ray. Headington, see *Rep. of Rec. Club*, 1880. Tackley Heath, *Rev. E. Fox.*

Berks. Near Blackwater Ford, *Brit.* Northants, Boro Hill, Harlestone. Warwick.

AGRIMONIA. *L.*

A. eupatoria, *L.* *Agrimony.*

Top. Bot. 154. Syme, E. B. iii. 128. 417. Nym. 238. Bx. 88.

Native. Pascual. Hedgebanks, wood borders, copses, etc. P. June-Aug.

First record, *Sib.* 1794.

1. *Stour.* Tadmarton, *A. Fr.*

2. *Ouse.* Mixbury.

3. *Swere.* Bodicote, Adderbury, North Newington, *Bees.* Milton, *A. Fr.*

4. *Ray.* Headington Wick, *H. Bos.* Studley, *Hb. Bx.* Marston, Wood Eaton, Noke, Albury, Bayswater.

5. *Isis.* Eynsham, Freeland, Woodstock, Cornbury.

6. *Thame.* Thame, *Hb. Bx.* Shotover, *H. Bos.* Dorchester, Cuddesdon, Tetsworth.

7. *Thames.* Abundant, and a form which much simulates *odorata*.

Berks. Childswell Farm, *Bx.* Wootton, Streatley, etc.

A. odorata, Mill.

Syme, E. B. iii. 131. 418. Nym. 238.

Native. Pascual. Wood borders, etc. Rare or overlooked. P. July, Aug.

First record, *H. Boswell*, about 1860.

4. *Ray.* Near Bayswater.

5. *Isis.* Coombe Wood, *H. Bos.* Mill Wood near Handborough.

6. *Thame.* Great Haseley.

7. *Thames.* South Stoke.

Berks. Streatley. Northants, Gloster, Warwick.

ALCHEMILLA. (L.) Scop.

A. vulgaris, L. *Lady's Mantle.*

Top. Bot. 156. Syme, E. B. iii. 137. 423. Nym. 238. *Bx.* 280.

Native. Pratal and sylvestral. Pastures, grassy places in woods.

Local. P. June-Aug.

First record, *Wm. Coles* in *Adam in Eden*, 1657.

2. *Ouse.* Finmere Churchyard, *E. Pryor* in *Walk*.

3. *Swere.* In Mill Mead by Rungill's Well near Adderbury, *Wm. Coles*, 1657. Behind Keeper's Lodge, Wroxton, *Gull.* Between Shutford and Balscot, near Wroxton Mill rare, Bodicot Grange, *Bees.*

4. *Ray.* In pastures near Stow Wood, *Wm. Coles* and *Sib.* Meadows between Beandon and Caversfield, borders of Stow Wood.

5. *Isis.* Wychwood abundantly! *Blackstone*, 1737. Do. *Sib.*, *Martyn*, *Gough*, *Milne*, and *Gordon*, etc. Burford Downs, *Sib.* Between Burford and Wychwood just above the 'Hit or Miss' public-house, Cassington, *Bx.* in *Walk*. In low moist meadows between Cassington and Yarnton, *Bx.* Singe Wood, *H. Bos.* Southcombe, var. *subsericea*. Charlbury railbanks.

6. *Thame.* Sydenham Hurst, *Hb. Bx.*

7. Thames. Stokenchurch, *Hb. Bz.* Chinnor, Widley Wood, Queen's Wood, Sunley Wood, near Watlington.

Berks. Kintbury, Elcot, *Brit.*

Is the var. *montana*, Willd., correctly described in Eng. Bot.?

A. arvensis, Scop. Parsley *Piert.*

Top. Bot. 157. Syme, E. B. iii. 136. 422. Nym. 238.

Native. Glareal and agrestal. Dry sandy fields, banks, and pastures, and on mud-topped walls in and about villages. Rather common and generally distributed, frequently attacked by some fungoid growth. A. May-Aug.

First record, *Sib.* 1794. *A. aphanes*, Leers.

SANGUISORBA. L.

S. officinalis, L. Great Burnet.

Poterium officinale, Hook, J. Top. Bot. 154. Syme, E. B. iii. 132.

419. Nym. 238. Bx. 269.

Native. Pratal. Damp meadows. Local and rather rare. P. June-August.

First record, *Blackstone*, 1737, *Sanguisorba major flore spadiceo*, J.B.

2. Ouse. Near Fringford, *R. C. Pryor.*

3. Swere. Between Cropredy and Williamscoth, towards King Sutton by canal side (on Oxford side), *Gull.* Hanwell, *Bees.* Deddington Meadows.

4. Ray. Oddington, *Bz.* Fencott, *A. Fr.* Marston, *Rev. R. Linton!* By the Cherwell near Oxford, *H. Bos.* Meadows near Upper Heyford, meadows near Weston Peat Pits; plentiful between Bicester and Charlton.

5. Isis. In Ascot field, and in a meadow near Spilsbury Church, plentifully, *Blackstone MSS.* In Ascot field near Wychwood Forest Gate, *Blackst. Spec. Bot.* Do. in *Gough*, *Martyn*, etc. Curbridge Meadow, Witney, *Mr. Fardon in Bot. Guide.* Binsey, *Sib.* 'A pretty Oxfordshire plant,' *Dr. Goodenough*, Bishop of Carlisle, *Sir J. E. Smith's Correspondence.* Yarnton, Wolvercote, *H. Bos.* Charlbury, Minster Lovell, near Eynsham.

6. Thame. Wheatley, *Prof. Daubeny*, 1841. Cowley, Iffley, *Sib.* Sandford Meadows, *W. T. Dyer, Journ. Bot.* ix.

7. Thames. Kidmore and Caversham, *P. Tufnail.*

Berks. Sandford Meadows, Cumnor, *Brit.*

POTERIUM. L.

P. sanguisorba, L. Salad Burnet.

P. dictyocarpum, Sp. Syme, E. B. iii. 133. 420. Top. Bot. 155. Bx. 438.

Native. Glareal. Dry grassy places. Rather common, especially on Oolite and Chalk. P. May-Aug.

First record, *Sib.* 1794.

1. **Stour.** Near the Stourwell.

2. **Ouse.** Mixbury, Ardley, Hethe.

3. **Swere.** Drayton Lane, *Gull.* Bretch, *Bees.* Wroxton, Hanwell, between Tadmarton and Swalecliffe, *A. Fr.* Somerton, Shutford.

4. **Ray.** Between Middleton Stoney and Bicester, *A. Fr.* Islip, *H. Bos.* Elsfield, Kirtlington, Bayswater, Stanton, Upper Heyford.

5. **Isis.** Burford Downs, *Sib.* Wychwood, Woodstock, *H. Bos.* Charlbury, Stonesfield, Ditchley, Lyneham Camp.

6. **Thame.** Wheatley, *Sib.* Bullingdon, Headington, *H. Bos.* Holton, Great Haseley, Tetsworth, Dorchester, etc.

7. **Thames.** Henley, *Sib.* Abundant on the Chalk, especially the Northern Slopes.

Berks. Cumnor, Frilford, Wytham.

* ***P. muricatum*, Sp.**

Comp. 166. Syme, E. B. iii. 135. 421. Nym. 240.

Colonist. Pascual and agrestal. Dry chalky fields, railbanks, etc.

Local and rare. P. June-Aug.

First record, *J. T. Boswell Syme*, about 1850.

4. **Ray.** Railbanks, Upper Heyford.

5. **Isis.** Railside, Charlbury.

7. **Thames.** Goring, *Dr. Boswell Syme, Phytol.* vol. iv. 861. Goring, sometimes wild looking, but not, I believe, truly wild, *Rev. W. W. Newbould.* South Stoke in clover field.

Var. *P. platylophium*, Jord.

7. **Thames.** Clover Field, near Mongewell, see *Rep. of Rec. Club*, 1881.

Berks. Streatley, Lowberry.

PYRUS. L.

***P. Malus*, L.** *The Crab.*

Top. Bot. 158. Syme, E. B. iii. 255. 489. Nym. 240.

Native. Septal. Woods, hedges. Common and generally distributed.

Small tree. May.

First record, *Sib.* 1794.

About Oxford with *Erineum Pyrinum*, Pers., and in Magd. Water Walks with a new species, *E. lanosum*, Grev. 1822, *Bz. MSS.*

The var. *P. acerba*, D C. is the common plant.

Var. *P. mitis*, Syme, E. B. iii. 490.

2. **Ouse.** Hardwick.

4. **Ray.** Middleton Stoney, Kirtlington.

7. **Thames.** Caversham Warren, *F. Tufnail.* North Stoke.

P. communis, L. *Wild Pear.*

Comp. Cyb. 167. Syme, E. B. iii. 251. 488. Nym. 240.

Denizen. Septal. Hedges. Local and rare. Small tree. April, May.

First record, *Sib.* 1794.

3. Swere. Meadow below Banbury, *A. Fr.* Bodicote, *R. French.*

Between Adderbury and Milton; near Swalecliffe; abundant by the Park, Great Tew, var. *Pyraster, A. Fr.*

4. Ray. Railside near Upper Heyford, *Rev. E. Fox.*!

5. Isis. Wychwood, *Rep. of Rec. Club*, 1881.

6. Thame. Cheney Lane, Headington, *Sib.* Near Woodperry house, near Thame Park, *A. Fr.* Shotover, 1858, *H. Bos.* Tree destroyed, 1880. Wheatley Road, Shotover, var. *P. Pyraster*, B. 1884.

7. Thames. Mongewell; near Wallingford; near Binfield Heath.

Berks. Hampstead Norris, Aldworth, *Brit.*

SORBUS. L.

S. aucuparia, L. *Mountain Ash.*

Pyrus aucuparia, Gaert.

Comp. Cyb. i. 369. Syme, E. B. iii. 248. 486. Nym. 241. Top. Bot. [23].

Denizen (?). Woods. Rare. T. May, June. It may be native on the Chilterns.

First record, *Gulliver*, 1821.

3. Swere. The Leys not uncommon, *A. Fr.*

4. Ray. A plant of some size on a Pollard Willow in Mesopotamia.

5. Isis. Freeland.

6. Thame. Headington Hill, *Hb. Lawson.* Shotover, Holton.

7. Thames. College Wood, Aston Wood, Binfield.

Berks. Copse near Childswell Farm, Bagley, *Bz.* Unwell Wood, Basildon.

Bucks, Northants, alien. Gloster. Warwick.

** *S. fennica, Fr.* Alien. Worcester College, planted.

S. Aria, Cr. *White beam Tree.*

Pyrus Aria (Sib. in Fl. Gr.), Hook.

Top. Bot. 159. Syme, E. B. iii. 243. 482. Nym. 242.

Native. Sylvestral. Woods on the chalk downs (planted elsewhere).

T. May, June.

First record, *Sib.* 1794.

3. Swere. Bodicote, planted.

4. Ray. Magd. Coll. Walks, planted.

5. Isis. Handborough.

6. Thame. Stanton St. John, *Sib.* *Crataegus Aria*, L.; Great Haseley, Shotover.

7. Thames. Stokenchurch, *Sib.* Goring, Hartslock Wood, Grime's

Dyke, Beacon Hill, Nuffield, Aston, Watlington, Assenton, Stonor Park, Woodcote, large fruit. Ibstone, Penley Wood, etc.

Berks. Streatley, Unwell Wood. Bucks. Northants, alien. Gloster. Warwick, alien.

A variety with leaves much more deeply incised than usual occurred by the Ickleton Road, near Ewelme; Dr. Boswell considered it only a form of *Aria*.

S. torminalis, Cr.

Pyrus torminalis, Ehrh.

Top. Bot. 158. Syme, E. B. iii. 241. 481. Nym. 202. Bx. III.

Native. Sylvestral. Woods. Very rare. T. May.

First record, Sib. 1794, *Crataegus torminalis*, L.

5. Isis. Woods near Ashford Mills, Sib. In woods and hedges on right-hand side of road going from Blenheim Park to Stonesfield, Bz. 1831. Wychwood, Prof. Lawson, 1871! 1885. Ditchley Wood, J. M. Albright.

6. Thame. Stanton St. John, Sib. Waterperry, A. Fr.

7. Thames. Stokenchurch Woods, Sib. Near Nettlebed (planted).

Berks. Bagley Wood, nearly opposite Kennington, Bz. Sulham Wood, F. Tufnail. Hampstead Norris, Brit.

MESPIUS. L.

M. germanica, L. Wild Medlar.

Cyb. Br. i. 364. Syme, E. B. iii. 335. 478. Nym. 243.

Denizen. Septal. Hedges and thickets, on chalk downs. Very rare. Small tree. May, June.

First record, Bolton King and Druce, 1880.

7. Thames. Wood near Henley Park, Bolton King. Hedges about Kildridge Wood.

The garden form at Moor Mill, near Banbury, Mr. Wyatt. Perhaps grafted on a Hawthorn.

Berks. Purley. Bucks, near Fawley, denizen.

CRATEGUS. L.

C. Oxyacantha, L. Hawthorn.

Top. Bot. 157. Syme, E. B. iii. 236. 479.

Native. Septal and sylvestral. Hedges, woods, etc. Abundant and generally distributed. A small round-headed tree. May, June.

First record, *Oxyacantha fol. et fruct. majore*. Ricot Park and elsewhere in Oxon, How, 1650. 'The Hawthorn at Bampton in the Bowling Green hedge, bearing white berries or haws, which indeed, I take to be a great curiosity. These berries, it is true, I saw not myself, not being there

in time of year for them, but being certified of the truth of it by the common voice of the parish, and particularly by the worshipful Thomas Hoard, Esq., who first told me of it,' *Plot*, 1677, do. in *Ray* i. ii. iii., *Ray's Stirp.*, *Gough*, *Martyn*, etc.

'The Glastonbury thorn at Rycote constantly buds and blossoms at or near Christmas, the tree is old and now dying, and if even it were transplanted, the time is far beyond the memory of man,' *Plot*, 1677.

Mr. Baxter noticed *Erineum clandestinum* and *Acidium laceratum*, D C. on the Hawthorn about Oxford.

Some fine thorns still occur on Ipsden Heath attaining nearly thirty feet in height.

Var. *C. monogyna*, Jacq. *Hawthorn*.

Syme, E. B. iii. 237. 480. Nym. 244.

Native. Septal. Hedges, etc. Common. Shrub or small tree. May, June.

Var. *C. oxyacanthoides*, Th. Widely distributed, but less common than preceding form. May and early June.

1. Stour. Sibford.

3. Swere. Cropredy.

4. Ray. Marston Lane, Noke, Charlton, Tackley, etc.

5. Isis. Wychwood, Lyneham.

6. Thame. Cowley.

7. Thames. Woodcote, etc.

ORD. XXIV. CUCURBITACEÆ, Juss.

BRYONIA. L.

B. dioica, L. *White Bryony*.

Top. Bot. 172. Syme, E. B. iv. 35. 517. Nym. 246. Bx. 83.

Native. Septal. Hedges. Common, especially on calcareous soil. P. May-July.

First record, Sib. 1794.

ORD. XXV. ONAGRARIÆ, Juss.

EPILOBIUM. L.

E. angustifolium, L. *Rose Bay. French Willow*.

Top. Bot. 160. Nym. 246. Bx. 14. *Chamænerium angustifol.* Scop.

Native. Sylvestral. Woods, etc. Locally common. P. July, Aug.

First record, Dr. Lightfoot, 1765.

Var. *E. macrocarpum*, Steph. Syme, E. B. iv. 8. 495.

3. Swere. Wroxton Wood, T. Bees. Jeff's Gorse Cover, T. Brayne.

5. **Isis.** Ramsden Copse, Enstone, *J. M. Albright*. Freeland, Ditchley, Bruern Wood, etc.
7. **Thames.** Nuffield Wood, 1765, *Dr. Lightfoot*. Stokenchurch, *Sib.* Grays, near Henley, *Dr. Lightfoot*, in *Sm. Eng. Fl.*, and *Fl. Brit.* Hayleigh Wood, Shirburn Wood, Aston Wood.
- Berks.** Bagley, above Childswell Farm, near Appleton, *Bz.* Bucks. Northants, native. Gloster. Warwick, denizen or native.
- Var. *E. brachycarpum*, Leight. Syme, E. B. iv. 8. 496.
4. **Ray.** Upper Heyford, *Rev. E. Fox*.
5. **Isis.** Between Chipping Norton and Shipton, *A. Fr.* Between Bladon and Begbroke, see *Rep. of Rec. Club*, 1880.
6. **Thame.** Wheatley railside. †
7. **Thames.** Between Nettlebed and Crookley, *A. Fr.*

***E. hirsutum*, L. Codlins and Cream.**

Top. Bot. 161. Syme, E. B. iv. 11. 497. Nym. 246.
Native. Paludal. Brook and stream sides, wet places. Generally distributed throughout the county and locally abundant. P. June–Sept.
First record, *Plot*, 1677, with white flowers in Oxon.

Baxter noticed on it in Bullingdon Bog and Marston Lane *Puccinia pulverulenta*, *Aecidium Epilobii*, *Stictis radiata*, *Sphaeria ovina*, and *Erysiphe Epilobii*. The Thames' banks are often bordered with a profuse growth of this plant. It forms a rich colouring when in flower, or in later autumn when the abundant seed-pods have opened. In the latter condition it is frequently represented in Keeley Halswelle's paintings of the Thames. A glabrous state is not uncommon, and a plant occurred in the Marston Meadows which suggested a *parviflorum* hybrid.

***E. parviflorum*, Schreb.**

Top. Bot. 161. Syme, E. B. iv. 11. 489. Nym. 247.
Native. Paludal. Ditches, meadows, and wet places. Common. P. June–Aug.

First record, *W. Baxter*, about 1840.

1. **Stour.** Near Sibford.
2. **Ouse.** Stoke Lyne, *E. Fry, Esq.* Hardwiok.
3. **Swere.** Between Bloxham and Tadmarton, *A. Fr.* Broughton, *E. Walford*,
4. **Ray.** Marshes by Cherwell between Kirtlington and Tackley, Lower Heyford, Marston, Oddington, Kirtlington.
5. **Isis.** Canal above Oxford, *H. E. Garnsey*, Yarnton, Wychwood, *Hb. R. Linton*. Handborough, South Leigh, Ditchley, Bruern.
6. **Thame.** *Hb. Bz.* Thame, Sandford, *Hb. Lawson*. Iffley.
7. **Thames.** Goring.

A subglabrous state, *E. rivulare*, Wahl., also occurs; it has been noted

from near Mixbury and Marston, *E. intermedium*, Merat, with leaves principally alternate also has been found near Marston.

***E. tetragonum*, L. (aggregate).**

Native. Paludal. Ditches, roadsides, etc. Not uncommon. P. July-Sept.

First record, *Sib.* 1794.

3. Swere. Between Huscot and Williamscoot, Broughton Road, *T. Bees*.

5. Isis. Handborough, Yarnton, *T. Thurland*.

6. Thame. Long Meadow going to Ifley, old gravel-pits Cowley field, *Bx. MSS.*

***E. tetragonum*, L. Segregate. *E. adnatum*, Gr.**

Syme, E. B. iv. 16. 502. Nym. 247.

Native. Paludal. Ditches in marshy places. Local. Rather rare. P. July-Sept.

First record, *the Author*, 1880.

4. Ray. Oddington, see *Rep. of Rec. Club*, 1883. Charlton and Islip, *Rev. W. Moyle Rogers*, 1884. Summertown, Headington, Merton to Bicester.

5. Isis. Port Meadow, rare.

7. Thames. Near Binfield.

Berks. Wargrave, Wokingham, *Brit.* Northants, Gloster, Warwick.

***E. obscurum*, Schreb.**

Top. Bot. 162. Syme, E. B. iv. 17. 503. Nym. 247.

Native. Paludal. Ditches, wet places. Not uncommon. P. June-Aug.

First record, *the Author*, 1880.

2. Ouse. Hethe, Hardwick, etc.

3. Swere. Somerton.

4. Ray. Headington, Bicester.

5. Isis. Ditch by the Isis near Botley, see *Rep. of Rec. Club*, 1880. Freeland, South Leigh, Osney, Bruern.

6. Thame. Shotover.

7. Thames. Near Stoke Row.

A form with *narrow leaves* was noticed at Freeland very different in aspect from typical *obscurum*, see *Rep. of Rec. Club*, 1881. A plant occurring in the woods near Bruern is worthy of further study. It may possibly prove to be *E. Lamyi*.

Berks. Bucks, Northants, Gloster, Warwick.

***E. roseum*, Schreb.**

Syme, E. B. iv. 14. 501. Nym. 249.

Native. Sylvestral. Damp waste places. Rare. P. July-Sept.

First record, *T. Westcombe*, about 1840.

4. **Ray.** Garden ground near Barton, 1880, not seen since.

5. **Isis.** Near Charlbury. I have not seen specimen.

Gloster, Warwick, Northants.

***E. montanum*, L.**

Top. Bot. 161. Syme, E. B. iv. 12. 499. Nym. 249.

Native. Sylvestral, septal. Woods, hedges, etc. Common and generally distributed, and next to *hirsutum* our commonest *Epilobium*. It occurs as a garden weed in Oxford, in shady hedges close to the town, and on Pollard Willows in The Parks. P. May-Sept.

First record, *Sib.* 1794.

A form with much darker flowers occurred near Kingham, which I suspect to be a hybrid.

***E. palustre*, L.**

Top. Bot. 162. Syme, E. B. iv. 11. 504. Nym. 248.

Native. Paludal, uliginous. Marshes. Local and rare.

First record, *Sib.* 1794.

3. **Swere.** [Huscote plentifully, *Beesley*, but Huscote is in Northants.]

4. **Ray.** Bogs near Stow Wood, *Sib.* Headington Wick Bog; much larger and more branched near Otmoor.

6. **Thame.** Near Thame, *Hb. Bx.*

Berks. Bulmershe, *F. Tufnail*. Frilford. Bucks. Gloster W. Warwick.

This is given in Walker without localities, as if it were as common as the daisy—it is one of our rarer plants.

GENOTHEA. L.

* ***G. biennis*, L.** *Evening Primrose.*

Alien. Comp. Cyb. 513. Syme, E. B. iv. 24. 508. Nym. 249.

3. **Ray.** Half wild in Bicester Church-yard, *A. Fr.* Waste ground in Stow Wood, *Rev. E. Fox*, 1857.

A North-American species becoming established in some places.

CIRCEA. L.

***C. lutetiana*, L.** *Enchanter's Nightshade.*

Top. Bot. 164. Syme, E. B. iv. 28. 511. Nym. 249. Bx. 9.

Native. Sylvestral. Moist shady woods. Generally distributed, but not very common. P. June-Aug.

First record, *Sib.* 1794.

2. **Ouse.** Shelswell.

3. **Swere.** Between Drayton and Wroxton, *Gull.* Hanwell, Christ Church Chapel ground, New Land, *A. Fr.* Broughton, *T. Bees.*

4. **Ray.** Begbroke, Magd. Coll. Walk.

5. **Isis.** Cornbury, *T. Westcombe!* Handborough, Mill Wood, Bruern.

6. Thame. Nuneham, *H. Bos.* Shotover Plantations.
 7. Thames. Chinnor, Withy Coppice, Oaken Wood, Mongewell,
 Sunley Wood, Goring, Stoke Row, Clump House, etc.
 Berks. Bagley, *H. Bos.*
 [C. *intermedia*, on a wall in Warwickshire.]

ORD. XXVI. HALORAGEÆ, *Br.*HIPPURIS. *Br.*

H. vulgaris, *L.* *Mare's Tail.*

Top. Bot. 166. Syme, E. B. iv. 33. 516. Nym. 250. Bx. 49.
 Native. Lacustral. Slow streams, pools, ditches. Local. P. June,
 July.

First record, *Sir Jos. Banks*, 'prope Oxoniam,' 1760.

2. Ouse. Wynn Brook below the bridge at Fringford, *R. C. Pryor.*
 3. Swere. Drayton, *Gull.* King's Mill rare, Clattercut Pool, Wroxton Lower Pond, brook between Wroxton and Drayton, *T. Bees.*
 4. Ray. Tackley.
 5. Isia. Blenheim Park! Eynsham Common, Binsey Common! *Sib.*
 Ditches near the Canal between High Bridge and Heyfield's Hut!
 Port Meadow! *Bz. in Walk.* Ditches near Oxford! *Rev. W. Rufford* in *Purton.* Godstow! *Hb. Lawson.* Cornbury Park in the ponds, Ditchley.

Berks. Buckland, *H. Bos.* Kintbury, Pangbourne, *Brit.*

MYRIOPHYLLUM. *L.*

M. spicatum, *L.*

Top. Bot. 168. Syme, E. B. iv. 32. 524. Nym. 250.
 Native. Lacustral. Ditches, ponds. Locally not uncommon. P. June-
 Sept.

First record, *Sib.* 1794.

3. Swere. Pond at Broughton, rare, *Gull.* Canal at Banbury, *A. Fr.*
 Jack Brook Broughton, *R. French.* Calthorp Pond, Clattercut
 Pool, Hardwick, *T. Bees.*
 4. Ray. Marston Meadows.
 5. Isia. Cornbury Pond, *T. Westcombe*, do. *Hb. Lawson.* Port
 Meadow, see *Rep. of Rec. Club*, 1880. Near Duke's Lock.
 6. Thame. In river at Thame, *Hb. Bz.*
 7. Thames. Henley in river, *Hb. Stubbs Br. Mus.*

Berks. Buckland, *H. Bos.* Ditches near Devil's Back Bone, 1844!
W. Bz. South Hinksey! Northants, Gloster, Warwick.

! *M. alterniflorum*, D C.

Syme, E. B. iv. 32. 515. Nym. 250.

Native. Lacustral. Overlooked or very rare.

First record, *Morison* (Bobart, 1699), '*In foss. prope Lodden Bridge haud longe a Redunga oppido.*' *M. aquat. pennatis minus foliosus, singularibus latiusculis flosculis subjectis donatum*, Hist. Ox. iii. 622.

This may be on the Berkshire side.

Berks (?), **Northants** (?). **Gloster** West, **Warwick**, **Farnborough Pool** just out of **Oxon**.

M. verticillatum, L.

Top. Bot. 167. Syme, E. B. iv. 31. 513. Nym. 250. Bz. 376.

Native. Lacustral. Rivers, streams, etc. Local. P. July, Aug.

First record, *Sib*. 1794.3. **Swere**. Mill Meadow, Brook in Grimsbury Wharf Close, *T. Bees*.Broughton Jack Brook, *A. Fr*. Clattercut reservoir.4. **Ray**. Ditches in Kirtlington Meadow, *W. Wilson Saunders*. Otmoor, Marston Meadows.

5. **Isis**. By bridge on Botley Road going to Medley, *Sib*. Ditches near Port Meadow, *Bz* 1819 in *Purton*. Blenheim, Wolvercote, *H. Bos*. Isis side below Medley Lock, Duke's Lock. The *Myriophyllum* of the Thames from Kelmscott to Eynsham.

6. **Thame**. River two miles from Thame, *A. Fr*.7. **Thames**. River at Henley, *Hb. Stubbs in Br. Mus*. Pond on Woodcote Common.

Berks. South Hinksey ditches by Devil's Back Bone! *W. Bz*. **Mar-cham**, Abingdon Canal.

Var. *M. pectinatum*, D C. With above, shallow ditches, Port Meadow, see *Rep. of Rec. Club*, 1880. Cornbury Park, Marsh by canalside near Duke's Lock.

ORD. XXVII. CALLITRICHINEÆ, Lk.

CALLITRICHÆ. L.

C. aquatica, L. (aggregate). *Water Starwort*.

Native. Ponds, streams, wet muddy places. Common and generally distributed. A. or P. April-July.

First record, *Sib*. 1794, who also gives var. b. '*C. terrestris, foliis omnibus ovalibus*,' and var. c. *C. autumnalis* (*C. hamulata*), *foliis omnibus linearibus apice bifidis, floribus hermaphroditis*. The var. a. having '*floribus androgynis*.' Prof. Sibthorp observes '*Planta polymorpha plus minusve in aqua submersa, figuram varians*. Var. a. in horto Oxon. culta in var. c. transit.' The *Brit. Flora*, p. 4, 1804, disputes this.

C. stagnalis, Scop.

Native. Inundatal, lacustral. Ditches, ponds, etc. Common and generally distributed. P. May-Aug.

First record, *Baxter*, about 1840, *sub nom.* '*verna autumnalis.*'

2. Ouse. Mixbury.

3. Swere. Somerton, Bloxham.

4. Ray. Marston ditches, Otmoor.

5. Isis. Burford, Handborough, South Leigh, Kingham, Port Meadow.

6. Thame. Thame, *Hb. Bx.* Albury, Dorchester, Iffley.

7. Thames. Sanders' Green, Stoke Row, Woodcote.

Berks. South Hinksey, Abingdon Canal, Marcham, etc.

Var. *platycarpa*, Kütz.

3. Swere. Clattercut.

4. Ray. Marston, Otmoor.

5. Isis. Side of river near Medley Lock, see *Rep. of Ez. Club*, 1880.

Berks. Radley.

C. obtusangula, Le Gall.

Native. Lacustral. Streams, ditches, etc. Not uncommon, May-Aug.

First record, *the Author*, in *Journ. of Botany*, Sept. 1884.

2. Ouse. Mixbury.

3. Swere. Broughton.

4. Ray. Kirtlington, Marston.

5. Isis. Evenlode near Handborough Station, Port Meadow, Clanfield, Kelmscott.

7. Thames. Brook between North and South Stoke, see *Journ. Bot.*, Sept. 1884.

Berks. Moulsoford.

A form with much narrower upper leaves (?), *C. Lachii*, Warren, occurred in some brooks at Marston.

In all the border counties.

C. hamulata, Kütz. Syme, E. B. viii. 120. 273.

Native. Lacustral. Streams, etc. Local. Not common. P. May-Aug.

First record, *Sir Jos. Banks*, 1760, *sub nom.* '*C. autumnalis*,' *prope Oxon.* in *Hb. Brit. Mus.*

2. Ouse. Mixbury.

4. Ray. Near Bicester, Marston.

5. Isis. Port Meadow, *Druce*, see *Rep. of Rec. Club*, 1880.

C. autumnalis of Walker's Flora is this.

The true *autumnalis* is very different, and is only found in the northern counties and Scotland.

Var. *C. pedunculata*, DC. Syme, E. B. viii. 121. 1274.

(Var. *b.* probably of Sibthorp.) Muddy places. Rare. P. May-Aug.

First certain record, *the Author*, 1879.

5. Isis. Freeland, Bruern.

7. Thames. Stoke Row, Woodcote, Ipsden Heath, Kingstone Hill.

Berks. Bagley Wood.

ORD. XXVIII. CERATOPHYLLACEÆ, Gray.

CERATOPHYLLUM. L.

C. aquaticum, E. B. (aggregate).

Top. Bot. 170. Syme, E. B. vii. 123. 1276.

Native. Lacustral. Rivers, ditches. Local. P. July, Aug.

First record, *Merrett*. *Millefolium aquaticum cornutum*. In ditches about Oxford, 1667.

2. Ouse. Mixbury.

3. Swere. Cherwell, near Twyford, *A. Fr.* Cherwell, about Banbury, *T. Bees*.

4. Ray. Near Merton. *Submersum*.

5. Isis. Wolvercote, south end of Port Meadow, *H. Bos.* Plentiful about Oxford, *Bz.* '*demersum*.' Ditchley, Medley Lock.

6. Thame. In river two miles from Thame, *Hb. Bz.* '*demersum*.' Between Sandford and Nuneham, *H. Bos.*

7. Thames. South Stoke, Moulsoford, *Rep. of Rec. Club*, 1880.

Berks. Buckland, *H. Bos.* Moulsoford, see above.

ORD. XXIX. LYTHRARIÆ, Juss.

LYTHRUM. L.

L. salicaria, L. *Purple Loosestrife*.

Top. Bot. 171. Syme, E. B. iv. 2. 491. Nym. 251.

First record, *Sib.* 1794.

Native. Paludal. Streamsides. Generally distributed by our rivers and streams, and especially abundant by the Thames, as at Pangbourne, 'where a glow of rich purple greets the eye, even from a considerable distance, wherever the Purple Loosestrife predominates' (*Mrs. S. C. Hall*). It is a prominent feature in paintings of Thames scenery, and is well represented in Vicat Cole's 'Iffley Mill,' etc. P. July-Sept.

** *L. acutangulum*, Lag. *L. Græfferi*, Ten. *L. flexuosum*, Lag.

Alien. A specimen on mud recently dredged from the river near Osney.

**** L. hyssopifolia, L.**

Top. Bot. (23 casual or erroneously reported). Syme, E. B. iv. 38. 492. Nym. 250.

Colonist. Inundatal. Damp places. Very rare, probably extinct. A. June-Sept.

First record, *Gratiola angustifolia*, John Gerarde, 1633.

5. *Isis*. On left-hand side of towing-path going from Wolvercote to Yarnton, not far from King's Bridge, *Mr. Scott, Worc. Coll.*, 1831. In watery places on the left-hand of the first turnpike gate on the Banbury Road, *Sib*.

6. *Thames*. Mr. Bowles found it at Dorchester on the back of the enclosed grounds on the left-hand side of road, if you would ride from thence to Oxford, in the grassy places of the Champions cornfields, *Gerarde, Em.*, p. 582. James Benwell found this pretty little plant in some old gravel-pits between St. Clement's and Cowley Marsh, soon after the publication of *Flora Oxoniensis*. I searched this place for two or three years without success. I have, however, since found it in considerable plenty in wet furrows in the neighbourhood of the gravel-pits, and also in the field between the London Road and Long Meadow, but in the greatest abundance on the north side of the London Road, about 150 yards from the enclosed fields, *W. Bx. MSS.*, 1825. On the right-hand side of road going from St. Clement's to Cowley Marsh, nearly opposite the foot-path to the Asylum, *Bx. MSS.*, Sept. 1848. Wallingford, Oxon, *Syme, E. Bot.*

Berks. Cholsey, *J. S. Henslow*, 1835. Northants extinct.

PEPLIS. L.

P. portula, L. *Water Purslane.*

Top. Bot. 172. Syme, E. B. iv. 4. 493. Nym. 252. Bx. 220.

Native. Uliginal. Wet places or heaths. Very local. P. July, Aug.

First record, *Sib*. 1794.

5. *Isis*. South Leigh Heath, Eynaham Heath, *Sib*. Ramsden Heath! *T. Westcombe*. North Leigh Heath, Bruern.

6. *Thame*. In an old clay-pit on N.E. side of Shotover, *Bx. MSS.*

7. *Thames*. Nettlebed, *Sib*. Woodcote Heath, Binfield Heath. The Ramsden Heath plant had the Hybernacula well developed.

ORD. XXX. PORTULACACEÆ, DC.**MONTIA. L.**

M. fontana, L. *Blinks.*

Top. Bot. 173. Syme, E. B. ii. 136. 259. Nym. 253. Bx. 196.

Native. Uliginal, inundatal. Wet places or heathy grounds. Local, rather rare. A. or P. April-Aug.

First record, *Sib.* 1794.

5. *Isis*. South Leigh Heath, *Sib.* Ramsden Heath, *T. Westcombe*. Wychwood, Finstock Heath, Bruern.

6. *Thame*. Shotover! *Sib.* Horspath, *Bx. in Walk.* Thame, 'Bates Leys,' *Bx. MSS.* Albury.

7. *Thames*. Woodcote Common, Binfield Heath, Ibstone, Ipsden Heath, Watlington Woods, Kingston Hill.

Berks. Powder Hill Copse, *H. Bos.* Bagley, Frilford.

** *Claytonia perfoliata*, *Donn.* Syme, E. B. ii. 137. 260.

Alien. Garden ground, Oxford, *Rev. R. Linton.*

[*Claytonia alsinoides*, *Sims.*

Mentioned as a new British plant received from Mr. W. Baxter, of Oxford, in the report of the Bot. Soc., Lond., but not stated by him to grow in Oxford, *Fr. MSS.* He had it from Mr. (afterwards) Sir Joseph Paxton, see *Bx.* 253.]

ORD. XXXI. SCLERANTHEÆ, *Lk.*

SCLERANTHUS. *L.*

S. annuus, *L.* *Knawel.*

Top. Bot. 173. Syme, E. B. vii. 181. 1175. Nym. 257. *Bx.* 439.

Native. Glareal, agrestal. Sandy cornfields. Local, not very common.

A. or B. June-Sept.

First record, *Sib.* 1794.

1. *Stour*. Tadmarton, *A. Fr.!*

4. *Ray*. Field by Headington Wick, *H. E. Garnsey*. Headington, *Sib.* Elsfield! *Rev. R. Linton.*

5. *Isis*. South Leigh, *Sib.* Wychwood, *Hb. Lawson.* Foxcot.

6. *Thame*. Shotover! *Bz.*

7. *Thames*. Mongewell, Nuffield, Goring, Whitchurch, Cane End, Woodcote, etc.

Berks. Boar's Hill, Frilford.

Var. *biennis*, Reut. Brightwell Downs, Oxon. Boar's Hill, *Berks.*

[*S. perennis*, *L.* Northants extinct. Warwick, 'Top. Bot. 38.' Probably an error, the variety *biennis* was more likely the plant intended, and the Northants plant may have been the same variety.]

ORD. XXXII. CRASSULACEÆ, *D C.*

COTYLEDON. *L.*

C. umbilicus, *L.* *Navel Wort.* *Umbilicus pendulinus*, *D C.*

Top. Bot. 178. Syme, E. B. iv. 62. 539. Nym. 258. *Bx.* 279.

Denizen. Rupestral. Old walls. Very local and rare. P. June-Aug.

First record, *Wm. Coles*, 1657, in *Adam in Eden*.

5. *Isis*. Oxford, especially about Merton College, there, both within and without, upon the old garden wall that is next the fields, *W. Coles*. Plentiful among the ruins of Osney Abbey and on Godstow Bridge, *Blackstone MSS.*, 1737. On walls of Rewley Abbey and on Godstow Bridge abundantly, *Bl. Spec.*, 1746. On a wall near Godstow Bridge and Nunnery, *Sib.* Osney Mill, *Hb. Br. Mus. col. Ed. Forster, Junr.* Coggs, *F. Westell.* Hailey near Witney, *H. Bos.*

6. *Thame*. Iffley, Cowley, *Sib.*

Berks. About Abingdon, *Wm. Bicheno.* Ferry Hinksey, *Bx.* South Hinksey, *H. Bos.* / Marcham. Northants, denizen or native. Gloster E. Warwick.

This is given in Walker as a common plant. It is fast disappearing from the county, if not already extinct.

** *Sempervivum tectorum*, *L.* *House leek.*

Syme, E. B. iv. 61. 538. *Comp. Cyb.* 516. *Nym.* 259. *Bx.* 401.

Alien. On walls and cottage roofs, scattered throughout the county, but with no claims to indigenuity.

SEDUM. L.

S. vulgare, *Lk.* *Orpine, Live-long.*

S. Telephium, *L.*

Top. Bot. 175. Syme, E. B. iv. 49. 526. *Nym.* 260.

Native. Sylvestral. Woods and thickets. Local, rather rare. P. July, Aug.

First record, *Wm. Coles*, 1657.

4. *Ray*. Headington Wick Copse, *Sib.* Stow Wood! *Bx. MSS.* Middleton Stoney, *Rev. E. Fox.*

6. *Thame*. Headington Quarries, *W. Coles.* Shotover, *Sib.*

7. *Thames*. Henley, *H. Bos.* Near Ipsden! *Rev. F. Bennett.* Kidmore, *F. Tufnail.* Grime's Dyke, Crowsley, Checkenden, Cane End.

Berks. Bagley! *Bx.* Buckland, *H. Bos.* Ilsley, Kintbury, etc., *Brit.* The above appear to belong to the variety *S. purpurascens*, Koch.

** *S. hybridum*, *L.*

Alien. Naturalized on village walls, and as frequent as *album*. Charlbury, Stonesfield, Clanfield, Handborough, Headington.

** *S. rupestre*, *Huds.* Syme, E. B. iv. 58. 536. *Comp. Cyb.* 179.

Alien. Walls at Barford St. Michael, Milcombe, A. Fr. Not un-

common about village walls in this neighbourhood, but has scarcely a claim to be considered wild, *A. Fr. MSS.* I have not seen specimen.

* *S. Forsterianum*, *Sm.* Syme, E. B. iv. 59. 537.

Alien. Walls at Bicester, *A. Fr.* I have not seen specimen; possibly both of these belong to next species.

* *S. reflexum*, *L.* *Yellow Stonecrop.*

Comp. Cyb. 516. Syme, E. B. iv. 58. 534. Nym. 261.

Alien. Old walls. Rather common. P. June-Aug.

First record, *Sib.* 1794.

3. Swere. Hanwell, North Newington! Deddington Castle, *Gull.*
Newland, *Bees.* Williamscoth, Adderbury, Barford, *A. Fr.* Shut-
ford, *T. Brayne.*

4. Ray. Bicester, *E. Chandler in Hb. Br. Mus.* Bletchington, Islip,
Marston, Heyford, Kirtlington.

5. Isis. Merton, Trinity, and Wadham College Walls, *Sib.* Hand-
borough, Woodstock, Wilcote, Burford.

6. Thame. St. Clement's, *Bz. MSS.* Great Milton, Great Haseley,
Tetsworth, Dorchester.

7. Thames. Maple Durham, Goring, Woodcote, etc.

Berks. Frilford, Marcham, Sandford.

S. acre, *L.* *Golden Stonecrop.*

Top. Bot. 177. Syme, E. B. iv. 55. 532. Nym. 262. Bz. 364.

Native. Glareal. Wall-tops and dry sandy ground. Common in the
former situation throughout the county. P. June, July.

First record, *Sib.* 1794.

* *S. album*, *L.* *White Stonecrop.*

Comp. Cyb. 516. Syme, E. B. iv. 529. *S. teretifolium*, *Haw.*

Alien. Old walls in and about villages. P. July, Aug.

First record, *Wm. Baxter MSS.* 1831.

2. Ouse. Mixbury.

3. Swere. West Adderbury, Upper Tadmarton, *A. Fr.* Epwell.

4. Ray. Several old walls at Upper Heyford, *Bz. MSS.* Bicester,
E. Chandler in Hb. Br. Mus. Plentiful on roofs in Islip, *Bz.* 1831.
Oddington, Beckley.

5. Isis. Kidlington, *H. Bos.* Charlbury, Fawler.

6. Thame. Cuddesden, *H. Bos.* Headington, Dorchester.

7. Thames. Maple Durham.

Berks. Marcham.

* *S. dasyphyllum*, *L.*

Comp. Cyb. 575. Syme, E. B. iv. 54. 530. Nym. 262.

Denizen. Old walls. Local and rare. P. June, July.

First record, *Sib.* 1794.

4. **Ray.** Magd. Coll. Walls, Rose Lane, *Sib.* Do. in *Purton*.

5. **Isis.** Ch. Ch. Walls on to meadow, *R. C. Pryor.* Woodstock, Long Handborough, Bampton.

6. **Thame.** Headington, Iffley.

Berks. South Hinksey, Bessilaleigh, Marcham, Cotham, Dry Sandford, Ferry Hinksey. Gloster E., Fairford, Lechlade. Northants, very rare, Brigstock.

This very local plant is given unlocalised in Walker's Flora.

[*Tillæa Muscosa*, *L.*

Top. Bot. 175. Syme, E. B. iv. 49. 526. Nym. 265.

4. **Ray.** Rev. E. Fox informs me this occurred at Upper Heyford in his garden on the grass-plot until he destroyed it. Recorded on very doubtful authority for Berks.]

ORD. XXXIII. GROSSULARIÆ, D C.

RIBES. *L.*

R. Uva crispa, *L.* *Wild Gooseberry.*

Comp. Cyb. 177. Syme, E. B. iv. 38. 518. Nym. 266.

Denizen. Septal. Hedges, etc. Not common, but generally distributed. Shrub. April, May.

First record, *Sib.* 1794. *R. uva crispa* '*baccis glabris*.'

2. **Ouse.** Ardley.

3. **Swere.** Broughton Road, *Bees.* Adderbury, Hanwell, Hardwick Hill, Burford, on a willow, *A. Fr.*

4. **Ray.** Near the Parks, *Bz. MSS.* Bucknell, Rousham, Magd. Coll. Walks.

5. **Isis.** Great Tew, *A. Fr.* Stonesfield.

6. **Thame.** Cowley field, Headington, White Wood, *Sib.* In a hedge at bottom of Peat Bog, Bullington, *Bz. in Purton.* Old quarries at Bullington, *H. Bos.* Dorchester, Shotover.

7. **Thames.** Goring, Cane End, Whitchurch, Watlington, Sunley Wood, Woodcote, 'glabrous fruit.'

I cannot apportion the above records to the two forms of *Grossularia*. Sibthorp's '*baccis glabris*' refers to *Uva crispa*, *L.* The hairy fruited form *B. Grossularia*, *L.* appears to be most frequent. I have seen it at

2. **Ouse.** Mixbury, *R. C. Pryor.* Hethe.

3. **Swere.** Near Somerton.

4. **Ray.** Between Heyford and Kirtlington.

5. **Isis.** Near Fawler, Stonesfield, Wychwood.

6. **Thame.** Near Clifton Hampden.

7. **Thames.** Mongewell.

* *R. nigrum*, L. *Black Currant*.

Comp. Cyb. 177. Syme, E. B. iv. 45. 523. Nym. 266.

Denizen. Septal, etc. Hedges and stream-sides. Local and rare.

Shrub. April, May.

First record, *R. C. Pryor*, 1832, or *Merrett*, 1667.

2. Ouse. Westbury and Finmere, *R. C. Pryor*.

3. Swere. On a willow tree, Barford, *Wm. A. French*.

4. Ray. Heyford.

7. Thames. Near Christmas Common.

Merrett, 1667, refers to *Ribes fructu nigro*. 'By the river side at Abington,' which may be an Oxford locality.

R. rubrum, L. *Red Currant*.

Comp. Cyb. 177. Syme, E. B. iv. 40. 520. Bx. 345.

Native. Sylvestral. Woods and hedges. Local. Shrub. April, May.

First record, *Sib*. 1794.

3. Swere. North side of Drayton Lane, *Gull*. Hanwell, Wroxton, Barford in a tree, *A. French MSS*.

4. Ray. Magd. Coll. Walks, *Sib*. Weston Peat Pits, *W. Wilson Saunders*. Weston-on-the-Green, *H. Bos*. Noke, Islip, Stow Wood, var. *R. sylvestre*, *Reich*. Rousham, var. *R. sativum*, *Reich*.

5. Isis. Copse near Godstow, *H. Ridley*. Finstock.

6. Thame. Shotover Plantations, *Bx*.

7. Thames. Goring.

Berks. Bagley, Childswell Farm, *H. Bos*.

Several of the above records are of the garden plant, *R. sativum*, Syme.

The Ray records are of the wild var. *sylvestre*.

** *R. alpinum*, L.

Alien. Naturalized near Whitchurch! *Bolton King*, 1881.

Northants alien. Gloster alien. Warwick denizen.

ORD. XXXIV. SAXIFRAGACEÆ, D C.

SAXIFRAGA. L.

S. granulata, L. *Meadow Saxifrage*.

Top. Bot. 181. Syme, E. B. iv. 77. 555. Nym. 272.

Native. Glareal and pascual. On gravelly soils. Locally common, but absent from considerable tracts of country. P. April-June.

First record, *Sib*. 1794.

1. Stour. Tadmarton Heath, abundant.

3. Swere. Near Adderbury, *Gull*. Pest-house field Bretch, *Bees*. Meadow Banbury, Tadmarton, Neithrop, *A. Fr*. Banbury locally common, *O. V. Aplin*. Crouch Lane, etc., *Bees*.

4. **Ray.** Abundant in Stow Wood at back of the Red Lion, *Bx.* Heyford, plentiful, *Rev. E. Fox.* Headington Wick, Elsfield, *H. Bos.* Beckley.
 5. **Isis.** Kidlington Common, Burford Downs, *Sib.* Near Spilsbury, *J. M. Albright.*
 6. **Thame.** Shotover! *Sib.*, do. *Bx. in Purton.* Wheatley, Dorchester on the Dykes, *Rev. F. Bennett.*
 7. **Thames.** Goring, *Hb. Lawson.* Mongewell Wood.
- Berks.** Wytham, *H. Bos.*

S. tridactylites, L. *Rue-leaved Saxifrage.*

Top. Bot. 181. Syme, E. B. iv. 75. 552. Nym. 274.

Native. Glareal. Old walls and dry ground. Generally distributed, but only locally common. A. April-June.

First record, *Sib.* 1794.

2. **Ouse.** Mixbury.

3. **Swere.** Breth, Tadmarton, walls about Banbury, *A. Fr.* Beckbrook very large form, *R. French.* Bloxham, Epwell.

4. **Ray.** Elsfield, *H. Bos.* Noke, Wood Eaton, Upper Heyford, Lower Heyford.

5. **Isis.** Garsington, Witney, *H. Bos.* Near Ashford Mills, Woodstock, Shipton near Wychwood, Stonesfield, Eynsham, Lyneham Camp.

6. **Thame.** Thame, *A. Fr.* Cowley, *H. Bos.* Nuneham, Cuddesden.

7. **Thames.** Goring, *Newb.* Maple Durham.

Berks. South Hinksey, Kennington, Marcham, Tubney.

** *S. hypnoides, L.*

Alien. Garden escape. Walls at Stanton St. John, *H. Bos.* Charlbury, etc.

CHRYSOSPLENIUM. L.

C. oppositifolium, L. *Golden Saxifrage.*

Top. Bot. 183. Syme, E. B. iv. 84. 563. Nym. 276. *Bx.* 140.

Native. Uliginal. Streams in shady places. Very local. P. April.

First record, *Sib.* 1794.

3. **Swere.** Near the flowing spring Horley, *A. Fr.*

4. **Ray.** Noke Wood, *Mr. Whiteaves*, 1856.

5. **Isis.** Sarsgrove Wood, *Hb. Bx.* 1831.

6. **Thame.** Shotover near the spring! Shotover Plantations! *Sib.* Horspath Lane! *R. Walker*, see *Bz. B. Pl.* 140. Holton Wood, *Mr. Whiteaves.* North side of Shotover, in abundance, by brook-side running to Shotover House.

Sibthorp notes, '*Variet plerumque floribus octandris.*'

Berks. Bagley, *Rev. E. Fox.* Tilehurst, in small coppice, *F. Tufnall.*
Bucks. at Bledlow, very near the Oxfordshire boundary.

[*C. alternifolium*, *L.* Berks, Bagley Wood, *Rev. E. Fox.*]
 Bucks, Clifden Wood, *Brit.* Gloster E., Warwick.

ORD. XXXV. UMBELLATÆ, *L.*

DAUCUS. *L.*

D. carota, *L.* *Wild Carrot.*

Top. Bot. 202. Syme, E. B. iv. 157. 615. Nym. 279. Bx. 180.
 Native. Pascual. Fields, roadsides. Very common and generally distributed. B. June–Aug.
 First record, *Sib.* 1794.

CAUCALIS. *Hfn.*

C. daucooides, *L.*

Top. Bot. 203. Syme, E. B. iv. 617. Nym. 281. Bx. 459.
 Colonist. Agrestal. Cornfields. Very rare, or extinct. A. June.
 First record, ? *Merrett*, 1667, *Caucalis echinophora major et minor purp.*; and near Slough, Middlesex (but no mention is made of this in the Middlesex Flora).

3. **Swere.** About Banbury, in cornfields, *Merrett* as above. Can this be *Merrett's* plant?

4. **Ray.** Cornfields between Middleton Stoney and Bucknell, *Sib.*

Caucalis lato apii folio, C. B. P. 'Inter segetes in comitatu Oxon. Bercheriæ aliusque invenitur,' *Morison*, iii. 308. Frequent in county of Oxford, *Sm. Eng. Fl.* No recent record.

The disappearance of this plant and *Bupleurum*, *Adonis*, and *Delphinium*, is probably owing to much cleaner seed-corn being now sown than was formerly used.

Berks. Reading, *Brit.* Northants extinct. Gloster, Warwick.

TORILIS. *G.*

T. anthriscus, *Gm.* *Hedge Parsley.*

Top. Bot. 203. Syme, E. B. iv. 163. 620. Nym. 281. Bx. 347.
Caucalis anthriscus, Huds. Native. Septal. Hedgesides and waste places. Abundant and generally distributed; occurring on the Castle Mound, etc., in Oxford. A. July–Sept.
 First record, *Sib.* 1794.

T. helvetica, *Gm.* *Caucalis arvensis*, Huds. *C. infesta*, Curt.

T. infesta, Spr. Top. Bot. 203. Syme, E. B. iv. 162. 619. Nym. 281.
 Native. Agrestal. Cornfields. Not uncommon, especially on calcareous soil. A. July–Sept.

First record, *Sib.* 1794, *Caucalis arvensis*, Ait., unless *Merrett's* '*Caucalis Echinophora minor*' in cornfields about Banbury refers to this.

1. Stour. Sibford.
2. Ouse. Hardwick.
3. Swere. Bretch, North Newington, *T. Bees*. Somerton, *A. Fr.*
4. Ray. Kirtlington, *H. Bos.* Beckley, Elsfield, Middleton Stoney.
5. Isis. Woodstock, *H. Bos.* North Leigh, Charlbury, Bruern, Kingham.
6. Thame. Thame, *Hb. Bz.* Shotover, *H. Bos.* Dorchester, Cuddesden, Iffley.
7. Thames. Near Chazey Wood, *F. A. Lees*. Goring, Nuffield, Chinnor. Berks. Boar's Hill, Tubney.

T. nodosa, G.

Top. Bot. 204. Syme, E. B. iv. 164. 621. Nym. 282. *Caucalis nodosa*, Scop.

Native. Glareal. Banks, field borders. Local, preferring dry sunny banks. A. May-Aug.

First record, *Sib.* 1794. *Caucalis nodosa*, Ait.

1. Stour. Near the Stourwell.
 3. Swere. On a bank at Oxford Bar Drayton, *Gull.* Bretch, *Bees*. Twyford, *J. French*. Bloxham Road, *A. Fr.*
 4. Ray. Headington Wick, *H. Bos.* Middleton Stoney.
 5. Isis. Bank near Heyfield's Hut, *T. Thurland*. Wolvercote, *Hb. Lawson*. Woodstock Road, *H. Bos.* Tangley, Wolvercote Bridge.
 6. Thame. Bullington, *H. Bos.* Near Thame, *Hb. Bz.* Shotover, Dorchester.
 7. Thames. Henley, *A. Fr.*
- Berks. Wootton, *Rev. F. Bennett*.

ANGELICA. L.

A. sylvestris, L. *Angelica.*

Top. Bot. 201. Syme, E. B. iv. 145. 607. Nym. 283. Bx. 491.

Native. Sylvestral. Woods, thickets, hedgerows, etc. Common and generally distributed. P. July, Aug.

First record, *Sib.* 1794.

Baxter found on stems of *Angelica Heterosphaeria Patella*, Grev., and several other fungi about Oxford.

PASTINACA. L.

P. sativa, L. *Wild Parsnep.*

Top. Bot. 202. Syme, E. B. iv. 151. 612. Nym. 289. Bx. 172.

Native. Viatical. Field borders, roadsides. Locally common and widely distributed; especially common on the Oolite, Clay, and Chalk. A. or B. July, Aug. *Peucedanum sativum*, B.

First record, *Sib.* 1794. *P. sylvestris*, L.

The glabrous form, *P. sativa*, Mill., occurs occasionally as a garden outcast.

HERACLEUM. L.

H. sphondylium, L. Hog-weed, Cow Parsnep.

Top. Bot. 302. Syme, E. B. iv. 154. 613. Nym. 291. Bx. 130.

Native. Septal. Hedgerows, pastures. Abundant and generally distributed. P. June-Aug.

First record, *Sphondylium hirsutum foliis angustioribus*, C. B. P. In *pratis Cornburiensibus agri Oxon.* Morison, iii. 313, 1699.

Baxter found *Puccinia Heraclea*, and *Dothidia Heraclea* on it about Oxford.

The narrow-leaved form, *angustifolium*, Bab., mentioned by Bobart, has also been noticed about Stonesfield, Tadmarton, Cropredy, and Goring. At Nuffield *Heracleum* occurred with dark red flowers, and also at Binfield. Pink flowered forms are not uncommon.

TORDYLIUM. L.

* *T. maximum*, L. Great Hartwort.

Top. Bot. 202. Extinct everywhere (?). Syme, E. B. iv. 155. 614. Nym. 390. Hook. Curt. vol. v. from an Oxf. sp.

Cyb. Br. i. 455. North limit in Oxford.

Denizen. Extinct. Septal. Hedgebanks. A. June.

First record, *Mortson*, iii. 316. *T. vulgatus semine plano flore ex rubente albo nobis.* In agro Oxon. in aggeribus fossarum, 1699.

4. Ray. Plentiful on banks of the road to Headington about half a mile from Oxford, *J. Sherard*, Ray, iii. 206, '*Tordylium Narbonense minus.*' Under hedges on the north side of the Parks, Sib., do. in *Bot. Guide*, etc., etc. Specimen in Sowerby's *Herb. Br. Mus.* The plate in *Eng. Bot.*, 1173, was drawn from an Oxford specimen. Specimen in *Ed. Forst. herb. in Br. Mus.* North side of Parks, 1821, in *Herb. Bx.*

5. Isis. On a bank beyond Jericho, about a quarter-mile west of the Observatory, *W. Bx.* 1819 in *Walk.*

Berks. Eaton, Turner, erroneously spelt Eton in *Walk.*

Ray's record refers to *Tordylium officinale*, but Morison's plant is *T. maximum*, as was also the plant from the Parks shown to Woodward, vide *With.* ed. iv. p. 365. Miller states that he found *T. officinale* growing on sides of banks in Oxfordshire, but adds 'the seeds were sown by Jacob Bobart, gardener at Oxford.' I have little doubt that Miller was mistaken in referring the Oxford plant to *officinale*. He was probably correct in suggesting or stating that Bobart planted it about Oxford. Most likely we owe *Senecio squalidus* to the same individual. *Tordylium* appears to have been found from 1696 to 1821.

[*T. officinale*, L. Oxford error. Cyb. i. 455. Comp. 520.]

* *Foeniculum officinale*, *All.* *Fennel.*

Alien. Cyb. Comp. 193. Occurs only as a garden stray, in no permanent station, the form being *F. vulgare*, G.

A solitary cluster in a field adjoining Mr. Draper's Road, Banbury, *A. Fr.* Near Goring.

Berks. Abundant on the banks of the Loddon near Sandhurst, *Miss De la Motte.*

SILAUS. *Bess.*

S. pratensis, *Bess.* *Pepper Saxifrage.*

Top. Bot. 200. Syme, E. B. iv. 140. 604. Nym. 292. Bx. 404.

Native. Pratal and pascual. Fields and roadsides. Rather common.

P. June-Sept.

First record, *Sib.* 1794. *Peucedanum Silaus*, L.

1. Stour. Near Sibford, *A. Fr.*

2. Ouse. Mixbury, Hethe.

3. Swere. Little Bourton, Milton, Bloxham, *A. Fr.* Hanwell, *T. Bess.*

4. Ray. Cherwell Meadows, Blackthorn, *H. Bos.* Oldbury, *W. Wilson Saunders.* Bletchington, Marston, Horton, Bicester, Charlton.

5. Isis. Yarnton Meadows, *H. Bos.* Minster Lovell, South Leigh, Grove Heath Wood, Kingham, Charlbury, Kelmscott.

6. Thame. Shotover, *Hb. Lawson.* Horspath, *H. E. Garnsey.* Littlemore, Dorchester.

7. Thames. Chinnor, *Hb. Bx.* Ipsden Heath, Whitechurch.

Berks. Childswell Farm, *H. Bos.* Frilford.

ETHUSA. *L.*

E. cynapium, *L.* *Fool's Parsley.*

Top. Bot. 199. Syme, E. B. iv. 132. 600. Nym. 297. Bx. 19.

Native. Agrestal. Cultivated ground. Common. A. July-Aug.

First record, *Sib.* 1794. Occurs in gardens in the city.

CEANTHE. *L.*

Ce. phellandrium, *Lam.*

Top. Bot. 198. Syme, E. B. iv. 130. 598. Nym. 297.

Native. Paludal. Marshes, riversides. Local and rare. P. July-Sept.

First record, *Sib.* (agg.) 1794. *Phellandrium aquaticum*, L.

3. Swere. Cherwell near Huscot *A. Fr.* I have not seen specimen.

4. Ray. Once or twice in the Isis and Cherwell, *H. Bos. in Phyt. n. s.* iv. 100. Water Eaton, *H. Ridley, M.A.* Noke, Oddington, etc. On Otmoor. Abundant at Charlton, etc.

5. Isis. Port Meadow, *Hb. Bx.*

6. Thame. In the river two miles from Thame (?), *A. Fr.*

7. **Thames.** Near Caversham Bridge, *A. Fr.*

Berks. Pond at foot of Winter Hill, *Brit.*

The submerged leaves of this are very different from those of *fluviatilis*, having capillary diverging segments as finely cut as those of Fennel. In the Ray on Otmoor this occurs to the exclusion of *fluviatilis*, and the plants grow in water at least two feet deep, when the submerged leaves alluded to are freely produced, but soon rot off.

***Æ. fluviatilis*, Cole.**

Top. Bot. 198. Syme, E. B. iv. 131. 599. Nym. 297.

Native. Lacustral. Streams. Common in all the larger streams, and much more abundant than *Æ. Phellandrium*. P. July–Sept.

First record, *Dillenius* 1726, and first as British *Millefolium aquat. Matth. Ed. Vulg. Aquat. foliis Coriandri Matthioli*, J. B. iii. See Ray, iii. p. 216, ‘in rivulo inter Woodstock et celebrem illum pontem Ducis Marlborugii juxta Blenheim.’

3. **Stwere.** Cherwell near Banbury, Somerton.

4. **Ray.** Plentiful in some parts of the Cherwell and Isis. Much more frequent than *Phellandrium*, *H. Bos. in Phyt.* Parsons’ Pleasure, *T. Thurland.* Oxford, *Hb. Lawson.* Ditches near Upper Heyford, Marston, etc., rather common.

5. **Isis.** Port Meadow, *Hb. Br. Mus. col. W. T. Dyer*, see *Journ. Bot.* ix. 146. Isis about Oxford. Abundant in river from Kelmscott to Oxford; in shallowish water flowering freely.

6. **Thame.** Thame river, *Hb. Bx.* Chiselhampton, Dorchester, Sandford, etc., common.

7. **Thames.** Pangbourne, Whitchurch, Caversham, *Newb.* Common in the Thames from Oxford southwards.

Berks. River Ock, Thames, and Loddon.

When growing on mud and wholly out of the water, the leaves of this plant retain the characteristic leaf cutting, so different in outline from the preceding species.

***Æ. crocata*, L. Hemlock Water-Dropwort.**

Top. Bot. 197. Syme, E. B. iv. 129. 597. Nym. 297. Bx. 160.

Native. Paludal. Marshy places. Most rare. P. July–Aug.

First record, *Sib.* 1794.

4. **Ray.** Near Bayswater, *Sib.* extinct.

7. **Thames.** Near Caversham, *F. Tufnail.*

Berks. Sulham. Bucks, Northants absent. Gloster W., Warwick.

The extreme rarity of this plant in Oxfordshire will surprise botanists from the western counties. Its thinning out so rapidly up the Thames valley is remarkable.

Æ. Lachenalii, Gmel. *Æ. pimpinelloides*, Sm. non Linn.

Top. Bot. 195. Syme, E. B. iv. 127. 596. Nym. 598.

Native. Uliginal. Marshes and bogs. Local. P. July–Sept.

First record, *Sib.* 1794, *peucedanifolia*, Poll., which included the habits of this species.

4. **Ray.** Stow Wood Bog! Headington Wick Bog! *H. Bos.* Beckley Grove Meadow, *Rev. Moyle Rogers.*

6. **Thame.** Bullingdon, *H. Bos.*, *Journ. Bot.* ix. 146. See *Rep. of Rec. Club*, 1880. (Also in *Walk. Fl.* aggregate.) Railside near Wheatley.

Berks. Frilford, *Rep. of Rec. Club*, 1881. Gloster E., Lechlade. Warwick, Honington.

Æ. peucedanifolia, Poll. *Sulphur-wort.*

Æ. Silaifolia, S. C. non Bieb. Top. Bot. 195. Syme, E. B. iv. 126. 595. Nym. 297.

Native. Pratal. Wet meadows. Local. P. June, July.

First record, *Dillenius*, 1730, 'prope Bladon in pratis elatis inter Oxford et Blenheim, *E. pratensis*.'

4. **Ray.** Weston Peat Pits (is, I suspect, *Lachenalii*), *W. W. Saunders.*

5. **Isis.** 'In pratis prope Bladon,' *Dillenius.*

6. **Thame.** Christ Church Meadow, abundant near the barges; also in meadows by the river near old railway station (Berks), *W. T. Dyer*, *Journ. Bot.* ix. 174. do. in *Hb. Br. Mus.* and *Hb. Oz.*, col. *H. Boswell.* Bank of Isis beyond Iffley, *Sib.* Long Meadow.

Berks. Sandford and Iffley Meadows, Pangbourne, Kennington, *Rec. Club*, 1883. Northants (!), King Sutton. Bucks, Gloster, Warwick.

Æ. fistulosa, L. *Water-Dropwort.*

Top. Bot. 195. Syme, E. B. iv. 124. 593. Nym. 298.

Native. Paludal. Wet meadows, marshes. Not uncommon. P. July–Sept.

First record, *Merrett*, 1666. *Enanthe aq. sive palustris.*

3. **Swere.** Austin's Meadows, *Gull.*

4. **Ray.** Magdalen College Meadows, *Merrett*, 1667, 1885! Upper Heyford, *Rev. E. Fox.* Marston, *Rev. R. Linton.* Otmoor, with very swollen stems, *A. Fr.* Marsh between Tackley and Kirtlington, Bicester, Islip, Marston, Merton.

5. **Isis.** In the ditches about Medley and Binsey Common, and abundant everywhere about Oxford, *D. Plot.* p. 147, var. *minor*, *Ray*, iii. 210, says 'A priore i. e. (*Enanthe aquatica*, *C. B. Pin.* 162), parvitate sua præcipue differt ut et modo florendi;' also in *Gough*, *Milne*, and *Gordon*, etc. Blenheim, Port Meadow! *H. Bos.* Witney, Bampton.

6. **Thame.** Iffley Meadows, abundant.

7. **Thames.** Caversham, North Stoke.

Berks. Tubney Wood, *H. Bos.* Radley.

A very variable plant.

[*E. pimpinelloides*, *L.* Gloster E.]

** *Myrrhis odorata*, *Scop.* Sweet-scented Cicely.

Scandix odorata, *L.* Syme, E. B. iv. 170. 626. Bx. 374. Nym. 299.

Casual. 'On rubbish and waste places. May. Rose Lane.' *Sib.*

This record expands in Walker's Flora to 'Mountainous pastures, [*sic*] Rose Lane, *Sib.*' The plant was an outcast or escape from the Botanic Gardens, and had no claims to rank among our established plants. From Sibthorp's record it was, however, entered in the *Bot. Guide*, and *New Botanist's Guide* for Oxfordshire.

CHEROPHYLLUM. *L.*

C. temulum, *L.* Rough Chervil.

Top. Bot. 206. Syme, E. B. iv. 169. 625. Nym. 300. Bx. 483.

Native. Septal. Hedges and shady places. Very common, and generally distributed. P. June, July.

First record, *Sib.* 1794. *C. temulentum*, *L.*

ANTHRISCUS. *Hfn.*

A. sylvestris, *Hfn.* *Keck.*

Top. Bot. 206. Syme, E. B. iv. 168. 624. Nym. 301. Bx. 228.

Native. Septal and sylvestral. Shady places. Abundant and generally distributed. Plentiful on Oxford Castle Mound. P. April, May.

First record, *Sib.* 1794. *Chærophyllum sylvestre*, *L.* The earliest Umbellate to flower.

* **A. Cerefolium**, *Hfn.* *Chærophyllum sativum*, *Lam.*

Comp. Cyb. 520. Syme, E. B. iv. 167. 623. Nym. 301.

Casual. Waste ground. Rare. A. May-July.

4. **Ray.** Oxford, *Hb. Br. Mus. col. W. T. Dyer*, 1867, see *Report of Ex. Club* for 1867, *Hb. Lawson*, do.

Berks. Near Windsor, *Brit.*

A. vulgaris, *P.* *Chærophyllum anthriscus*, *Lam.*

Top. Bot. 205. Syme, E. B. iv. 166. 622. Nym. 301.

Native. Vistical. Waysides, walls, etc. Very local and rare. A. May, June.

First record, *Sib.* 1794. *Scandix anthriscus*, *L.* Unlocalised.

3. **Swere.** On a wall in Newland, *Gull.*, do. *Bees.*, very rare; on a wall at top of Leys, 1848, Bodicote, *T. Bees.* Wall in Fish Street, old wall back of Calthorpe Street, Banbury, *A. Fr.*

5. **Isis.** Witney, *F. T. Richards, M.A.* Formerly on Woodstock Road, *H. Bos.*

6. **Thame.** Between Shotover and Wheatley, *Hb. T. Thurland*; do. see *Phyt.* iv. n. s. 101, *H. Boswell*; do. *Hb. Br. Mus.* 1859. In hedge by path from Cowley Marsh to Cowley Bog! *H. E. Garnsey, M.A.*

7. **Thames.** Caversham, *Newb.!*

Berks. Not unfrequent about Cotham, Marcham, and Frilford.

The rarity of this plant in Oxfordshire is peculiar; in Northamptonshire, north and east, it is frequent; its beautiful bright green and elegantly cut foliage adorning many of the village walls. Led by its general, rather than by its local distribution, Walker gave it as if it were one of our common plants, and so not needing special localities. It is in fact one of our rarest species.

SCANDIX. L.

- S. pecten-Veneris, L.** *Shepherd's Needle.*

Top. Bot. 207. Syme, E. B. iv. 171. 627. Nym. 302. Bx. 272.

Colonist. Agrestal. Cornfields. Very common and generally distributed. A. April-Oct.

First record, *Sib.* 1794. *S. Pecten*, L. p. 100.

CONOPODIUM. K.

- C. denudatum, K.** *Pig-nut.*

Top. Bot. 191. Syme, E. B. iv. 133. 584. Nym. 303. Bx. 433.

Native. Sylvestral. Woods, thickets, heaths, etc. Common and generally distributed. P. May-July.

First record, *Sib.* 1794. *Bunium flexuosum*, With.

CICUTA. L.

- C. virosa, L.** *Water Hemlock, Cow Bane.*

Syme, E. B. iv. 97. 571. Nym. 304. Bx. 395.

Native. Paludal. Wet places. Very rare. July, Aug.

First record, *Rev. E. Fox*, 1860 (?).

4. **Ray.** Between Bicester and Middleton, *Rev. E. Fox*. Believed to have been seen about Wood Eaton, *H. N. Ridley, M.A.*

Berks. Near Wellington, *Brit.* (?).

SIUM. L.

- S. latifolium, L.** *Great Water Parsnep.*

Top. Bot. 192. Syme, E. B. iv. 117. 587. Nym. 305. Bx. 319.

Native. Paludal. Streamsides. Locally abundant. P. July-Sept.

First record, 'By Reading, *How's Phytologia*, 1650, also more precisely *S. medium foliis elegantis, dissectis*. In some ditches about Oxford,' *Merrett*, 1667.

4. **Ray.** Cherwell! *H. Bos.* Otmoor, Marston, etc.
5. **Isis.** Port Meadow, *H. Bos.* Eynsham, *T. Westcombe.* Chimney, Wolvercote, abundant about Oxford, and an especial feature in its Flora.
6. **Thame.** Thames Meadows Oxford, *Hb. Br. Mus.*, *W. T. Dyer.*
Abundant by the Thames southwards, as at
7. **Thames.** Sonning, *F. A. Lees.* Caversham, etc.

The ditches about Oxford always yield an abundance of this handsome and conspicuous plant. The earlier leaves are submerged, and are often most beautifully dissected (Merrett's record refers to this); these submerged leaves have been gathered in January, in excellent condition. A form occurred by Port Meadow, in which the bracteoles were so much developed as to become foliaceous, the stem leaves had very narrow leaflets with the margin dentately cut. The whole appearance of the plant was very different from the type with which it grew. The fruit was quite normal.

Berks. Kennington, and by river from Oxford to Reading. **Bucks.** Northants, Gloster E., absent from Warwick.

S. erectum, Huds. *Water Parsnep.*

Top. Bot. 193. Syme, E. B. iv. 118. 588. Nym. 304. *S. angustifolium*, L.

Native. Paludal. Ditches, streams. Rather common, but much scarcer round Oxford than the preceding species. P. July, Aug.

First record, *Sib.* 1794, p. 98, *S. angustifolium*.

1. **Stour.** Sibford.
2. **Ouse.** Mixbury.
3. **Swere.** Banbury Common, Barford St. John, *A. Fr.* Bodicote, *R. French.*
4. **Ray.** Behind the Parks, *Sib.* Ditch on north side of Magd. Meadow, Marston Meadows, Otmoor, etc.
5. **Isis.** Near Charlbury, *T. Westcombe.* Between Botley and Medley Lock, 1831! *Bx.* Binsey Lane, South Leigh, etc.
6. **Thame.** Waterstock, *A. Fr.* Dorchester, Shotover, stream running to Shotover House, Wheatley, Chiselhampton, etc.
7. **Thames.** Caversham.

Berks. Marcham, South Hinksey.

SISON. L.

S. amomum, L. *Hedge Hone Wort.*

Top. Bot. 190. Syme, E. B. iv. 106. 578. Nym. 305. *Bx.* 407.

Native. Septal. Hedges, roadsides. Not uncommon, and widely distributed. B. Aug., Sept. Mr. Watson appeared to doubt its indigenuity, *had he seen the plant in Oxon, Bucks, and Northants*, his opinion would

probably have been in favour of its being a native plant. It is more frequent on Clay soil.

First record, *Sib.* 1794.

2. Ouse. Mixbury.

3. Swere. Broughton Road, Shutford Lane, Crouch Lane, *T. Bees*. Saltney, Wykeham Lane, between Bloxham and Tadmarton, *A. Fr.* Broughton, Somerton.

4. Ray. Marston, Islip, *H. Bos.* Otmoor, *H. E. Garnsey, M.A.* Summertown, *Hb. R. Linton.* Marston Lane! *Sib.* Elsfield, Bletchington, Kidlington.

5. Isis. Eynsham, *Sib.* In great abundance between fourth and fifth milestone on the Banbury Road; between Wolvercote and the Woodstock Road; Handborough, South Leigh, Charlbury.

6. Thame. Roadside to Shotover, *Sib.* Thame, *Hb. Bx.* About Cowley, *Bx.* Albury, Horspath.

7. Thames. Woodcote, Dunsden, Chazey Heath, *F. A. Lees.* Goring, etc. Berks. Botley, Ferry Hinksey. I fail to see the close resemblance to *P. segetum*.

EGOPodium. L.

E. Podagraria, L. *Gout-Weed.*

Top. Bot. 191. Syme, E. B. iv. 109. 580. Nym. 305. Bx. 151.

Denizen or native. Viatical. Hedges, waysides, and springs, near villages. Rather common and widely distributed. P. June-Aug.

First record, *Sib.* 1794, p. 103.

1. Stour. Tadmarton, Sibford.

2. Ouse. Hethe.

3. Swere. Between Wroxton and N. Newington, Road to the Marches, *Gull.* Neithrop, Hanwell, Swalecliffe, etc., *A. Fr.* Shutford.

4. Ray. Headington Wick Copse, *Sib.* Islip, Kirtlington, *H. Bos.* Water Eaton, about Magdalen College, *H. E. Garnsey, M.A.* Beckley, *Rev. W. Moyle Rogers.* Near Bicester, etc.

5. Isis. Canalbanks near High Bridge! *Sib.* Burford, Charlbury, Finstock, Sarsden, Chadlington, Worcester College Gardens, etc.

6. Thame. Shotover Road.

7. Thames. Woodcote, etc.

It may be native in a few of the above localities, but it is such a persistent weed, that when once introduced it is with difficulty eradicated.

PIMPINELLA. L.

P. major, Huds.

Top. Bot. 192. Syme, E. B. iv. 116. 584. Nym. 305. *P. magna, L.*

Native. Sylvestral and septal. Woods and hedges. Local. P. July, Aug.

First record, *Sib.* 1794, *P. magna, L.*

4. **Ray.** Stow Wood, Noke Woods, *Sib.* Headington Wick, *Rev. R. Linton.* Headington Copse, *H. Bos.* Beckley, Marston Meadows, Charlton.
 5. **Isis.** Finstock, Mill Wood, Pinsley Wood, Binsey.
 6. **Thame.** Side of foot-path leading from Bullington to Shotover, *Bz.* Shotover Plantations, *Prof. Daubeny.* Brasenose Wood, *H. Bos.* Horton and Woodperry.
 7. **Thames.** Goring to Woodcote, Stokenchurch, Sunley Wood, Crowsley.
- Berks.** Between Botley and Cumnor, *Bz.* Bucks, Northants, Gloster, Warwick.

In Horton Wood occurred a variety with deeply cut leaves, *P. dissecta*, Fries, non Retz.

The *Pimpinella* appears to like an argillaceous soil, and is found on Oxford, London, or Kimmeridge Clay.

P. saxifraga, L. *Burnet Saxifrage.*

Top. Bot. 192. Syme, E. B. iv. 115. 585. Nym. 306. Bx. 411.

Native. Pascual. Dry pastures, etc. Common and generally distributed, more especially abundant on the Oolite and Chalk. P. July-Sept.

First record, *Sib.* 1794.

A very variable plant, five varieties being described by Koch in the Synopsis. Sometimes the leaves are very slightly cut, but the variety with deeply cut leaves also occurs; this was given as a species in Sibthorp under *P. dissecta*, Retz, it being localised between Witney and Burford and near Henley. It is not uncommon, especially on the Chalk.

**** Carum Carui, L.** *Carraway.*

Syme, E. B. iv. 116, 582. Nym. 307. Bx. 232.

Casual. In a meadow off the Botley Road, *H. Bos. Phyt.* iv. n. s. 101. Introduced. Railside, Oxford.

PETROSELINUM. Hfn.

P. segetum, K. *Corn Parsley.*

Carum segetum, Benth.

Top. Bot. 190. Syme, E. B. iv. 105. 579. Nym. 309. Bx. 360.

Native. Septal. Hedgesides, cornfields, etc. Local and rare. A. Aug., Sept.

First record, *Sib.* 1794, *Sison segetum*, L.

4. **Ray.** Kirtlington, near the Station, *H. Bos.* On a bank on the right-hand side of road going into Elsfield, 1831; between Somerton and Kidlington Toll Gate, *Bz.*
5. **Isis.** South Leigh, *Sib.* On Banbury Road near the fifth milestone from Oxford; Woodstock roadside, *Rev. E. F. Linton.* Burford.

6. Thame. Stanton St. John, *Rev. E. Fox*. Bullingdon, between Bullingdon and Shotover, *H. Bos.* Field on east side of Peat Bog going from Bullingdon Green to Cheney Lane, 1827, *Bz.*, *do.* 1884 *G. C. D.* Copse on south side of Shotover, *Bz.*

7. Thames. Caversham, *Phyt.* ii. n. s. 340.

Berks. Sunningwell, *H. E. Garnsey, M.A.* Near Botley on road to Eynsham, 1831, *Bz.* Near 'Dreadnought,' Sonning, *F. Tufnail*. West side of Boar's Hill.

* *P. sativum*, *Hfn.* *Parsley.*

Alien. *Cyb.* i. 430. *Syme, E. B.* iv. 103. 576. *Nym.* 309. *Carum petroselinum*, *B.*

3. Swere. Draper's Road Banbury, rocks among gardens Swalecliffe, *A. Fr.* 1863.

5. Isis. Wolvercote, escape; naturalized on site of an old cottage between Fawler and Charlbury.

6. Thame. Garden escape Thame, Waterstock Mill, *A. Fr.*

7. Thames. Watlington.

Berks. Near Cumnor, *H. Bos.*

APIUM. L.

A. graveolens, *L.* *Wild Celery.*

Syme, E. B. iv. 98. 572. *Nym.* 309. *Bz.* 156.

Native. Paludal. Wet meadows. Local and rare. *P.* June-Aug.

First record, *Sib.* 1794.

4. Ray. Marston! *Sib.* Near Elsfield! *R. Walk.* I believe this to be native here. Its absence from Otmoor is remarkable.

5. Isis. Stanton Harcourt, South Leigh, *Sib.*

6. Thame. Near Thame, *Hb. Bz.*

Berks. Marcham, native, growing with *Scirpus sylvaticus*, *Rep. of Rec. Club*, 1881. Cumnor, *H. Bos.*

Obs. The cultivated form *A. dulce*, *Mill.*, occurs occasionally on rubbish heaps about villages as a garden outcast.

Bucks, near Fenny Stratford, probably native. Northants alien. Gloster native. Warwick.

HELOSCIADUM. K.

H. nodiflorum, *Koch.* *Common Water Parsnep.*

Apium nodiflorum, *Reich.*

Top. Bot. 190. *Syme, E. B.* iv. 100. 573. *Nym.* 309. *Bz.* 415.

Native. Paludal. Streams and wet places. Very common and generally distributed. *P.* July-Oct.

First record, *Sib.* 1794. *Sium nodiflorum*, *L.*

Var. *H. ochreatum*, D C. *H. repens*, E. B. non Koch.

Wet meadows, etc. Common about Oxford.

4. Ray. Kidlington, etc.

5. Isis. Wychwood, Port Meadow, Binsey.

Var. *H. longipedunculatum*, Sch. 'Common peduncle, longer than leaves,' see *Rep. of Rec. Club*, 1880, p. 146.

6. Thame. *Hb. Br. Mus.*, *Sir Jos. Banks*. 'Found by Dr. J. Sibthorp in Cowley Bottom [Bullington Bog] near Oxford. I received this specimen from Milne, his gardener.' Bullington Green Peat Bogs, '*Stium repens*,' L., *Sib.* Ifley Meadow.

Berks. Between South Hinksey and Abingdon Road, *Bz.* Frilford.

Some of our *repens* forms match the description in the Student's Flora of Koch's plant, but the occurrence of the true plant is yet doubtful.

***H. inundatum*, Koch. Water Hone-Wort.**

Apium inundatum, Reich.

Top. Bot. 190. Syme, E. B. iv. 102. 575. Nym. 310.

Native. Lacustral. Pools on heaths. Local. P. June-Aug.

First record, *Sir Jos. Banks*, 1760. *Sison inundatum*, L.

4. Ray. Otmoor, *Sib.*

5. Isis. Binsey! Port Meadow! South Leigh Heath, *Sib.* Ramsden Heath! *T. Westcombe*. North Leigh Heath.

7. Thames. On a common near Nettlebed, *Hb. Br. Mus.*, *Sir Jos. Banks*. Binfield Heath, Woodcote Common, Ibstone Common.

BUGLEURUM. L.

***B. rotundifolium*, L. Thorough-Wax. Hare's Ear.**

Top. Bot. 194. Syme, E. B. iv. 120. 589. Nym. 310. Bx. 13.

Colonist. Agrestal. Cornfields. Local, rare, and decreasing. A. June, July.

First record, *Wm. Coles* in *Adam in Eden*, 1657.

2. Ouse. Cottisford Fields, *Bz. MSS.* Juniper Hill, *H. Blaby*.

4. Ray. In cornfields about Bechentre in the way between Oxford and Deddington, very plentifully, and is taken into the gardens by those who know the use of it, *Wm. Coles*. Middleton Stoney, *Sib.* Kirtlington, *Bz.* The Parks, *Sib.* Weston, *W. Holliday*.

5. Isis. South Leigh, *Sib. Ed. Forster*, in a field on the road to Woodstock, near the Observatory, *Hb. Br. Mus.* Do. *Bz. MSS.* Between Church Handborough and the Mill near Northmoor, *Bz.* Near Charlbury, *T. Westcombe*. Near Mill Wood, Church Handborough.

6. Thame. Bullington Green, *Bz. in Walk.* Field opposite Brasenose Wood, *H. Bos.*

Berks. Cumnor Hurst, Buckland, Bablock Hithe, *H. Bos.* Streatley, *Blewbury, Brit.*

CONIUM. L.

C. maculatum, L. *Hemlock.*

Top. Bot. 187. Syme, E. B. iv. 173. 629. Nym. 315. Bx. 303.

Native. Sylvestral, septal. Damp woods, hedges. Rather local, and not common round Oxford. P. June-Aug.

First record, *Sib.* 1794.

2. Ouse. Mixbury.

3. Swere. Hedge between first marsh and Castle Garden, *Gull.* Rather plentiful in some seasons, *Bees.* Berry Moor, Wykeham Lane, Hardwick, *A. Fr.*

4. Ray. Summertown, *Hb. Lawson.* Marston Lane! *H. Bos.* Kirtlington, Water Eaton, Islip to Bletchington, Bicester, Weston Peat Pits abundant, Noke.

5. Isis. Cornbury, *T. Westcombe.* Godstow, Witney, *H. Bos.* Wychwood, Freeland, Kingham, Handborough nine feet high, Newbridge, abundant in cornfield near Tangle, Ascot.

6. Thame. Hell Copse, in Thame, *A. Fr.* Do. *Hb. Bx.* Abundant about Moreton, Rycot, etc., Albury, Great Haseley.

7. Thames. Crowsley, Goring, Henley Park Hill, Cane End. Berks. Wytham.

* **Smyrniolum Olusatrum, L.** *Alexanders.*

Denizen or alien. Waste places. Local and rare. P. May.

First record, *Sib.* 1794.

6. Thame. Near Bensington.

7. Thames. Caversham, *Bolton King*, 1879.

Berks. About Windsor Castle, *Brit.*! casual. Bucks (!), Gloster, W. [*Eryngium campestre, L.* Roadside near Brockhall, Northants, 1850.]

SANICULA. L.

S. europaea, L. *Wood Sanicle.*

Top. Bot. 187. Syme, E. B. iv. 92. 568. Nym. 318. Bx. 235

Native. Sylvestral. Woods. Abundant as a woodland plant throughout the county. P. May-July.

First record, *Wm. Coles*, 1657, in *Adam in Eden.* Stow Wood, in several places among the bushes.

HYDROCOTYLE. L.

H. vulgaris, L. *White Rot. Penny-wort.*

Top. Bot. 186. Syme, E. B. iv. 90. 566. Nym. 319. Bx. 168.

Native. Uliginal. Marshes, bogs, etc. Local. P. May-Aug.

First record, *Wm. Coles*, 1657.

4. Ray. Headington Wick, *Hb. Rev. R. Linton.* Stow Wood, in a

valley or bog, *W. Coles* in *Adam in Eden*. Abundant in bog under Stow Wood, railside near Bicester, very fine.

5. Isis. Wychwood, *H. Bos.* Southcombe, *T. Bees*. North Leigh Heath, Finstock Heath, Handborough Meadows.
6. Thame. Cowley Marsh, *Hb. Bz.* Bullingdon.
7. Thames. Binfield Heath, also a floating form.
- Berks. Boar's Hill, Bagley, Frilford.

ORD. XXXVI. ARALIACEÆ, *Juss.*

HERERA. *L.*

H. helix, *L.* *Common Ivy.*

Top. Bot. 185. Syme, E. B. iv. 181. 633. Nym. 319. Bx. 32.

Native. Sylvestral. Woods, hedges, etc. Generally distributed. Oct.-Nov.

First record, *Sib.* 1794. Mr. Baxter noticed *Sphaeria punctiformis* and *Hysterium follic.*, var. *Hederæ*, about Oxford. The ivy flourishes in Oxford on the walls of New College, Merton, University, and a number of cultivated forms are growing on Wadham Garden Walls.

ORD. XXXVII. CORNÆ, *D C.*

CORNUS. *L.*

C. sanguinea, *L.* *Dogwood.*

Top. Bot. 185. Syme, E. B. iv. 187. 635. Nym. 319. Bx. 114.

Native. Septal. Hedges, thickets. Common, especially on calcareous soil. Shrub. June, July, and occasionally in Aug.

First record, *Plot*, 1677, 'with striped foliage.'

1. Stour. Sibford.
2. Ouse. Mixbury, Hethe, Cottisford.
3. Swere. Road to Adderbury, Hardwick Road near the Canal, *Gull*. Hanwell, Bloxham Road, Milton, Great Tew avenue, leaves very fine, *A. Fr.* Bretch fine large bush.
4. Ray. Marston, *Rev. R. Linton*. Near Oxford with *Sphaeria cornuscola*, *Bz.* Blackthorn, Gravehill Wood, *H. Bos.* Tackley, Stow Wood.
5. Isis. Bruern, Witney, Burford, Handborough, Stonesfield, Binsey Lane, etc.
6. Thame. Cowley Marsh, *H. Bos.* Waterstock, *Plot*. Shotover, etc.
7. Thames. Caversham, *Newb.* Grime's Dyke, Nettlebed, Ibstone, Ipsden, Goring, Nettlebed, etc.

Berks. Wytham, Hinksey, Cumnor, etc.

* * *Cornus Mas*, *L.* Planted in Ch. Ch. Meadows, Mesopotamia, etc.

ORD. XXXVIII. LORANTHACEÆ, Don.

VISCUM. L.**V. album, L.** *The Mistletoe.*

Top. Bot. 207. Syme, E. B. iv. 189. 635. Nym. 320. Bx. 40.

Native. Sylvestral. Parasitic on various trees. Rare. P. March-April.

First record, *Sib.* 1794. Bland's Court.3. Swere. Wroxton Park rare, *Bees*.4. Ray. On poplar at Heyford, *Rev. E. Fox*.

5. Isis. Eynsham on apple-tree.

6. Thame. Ch. Ch. Meadow on poplar.

7. Thames. Ibstone, *Bx.* On old apple-trees, *Bx. MSS.* Maple Durham, on *P. nigra*, *F. Tufnail*.Berks. Abundant on willows at Appleton, *Miss Hoskins*.

ORD. XXXIX. CAPRIFOLIACEÆ, Rich.

VIBURNUM. L.**V. Opulus, L.** *Gelder Rose.*

Top. Bot. 209. Syme, E. B. iv. 202. 639. Nym. 320.

Native. Sylvestral. Moist woods; not uncommon. Shrub. May, June.

First record, *Sib.* 1794.2. Ouse. Stoke Lyne, *E. Fry, Esq.*3. Swere. Hardwick Road, Hanwell foot road, *Bees*. Broughton Road, *T. Bees*. Huscote, *T. Brayne*.4. Ray. Marston, *Rev. W. Linton*. Oddington, Piddington Wood, Studley, Kidlington, Headington Wick, Kirtlington, Weston Peat Pits.

5. Isis. Bruern Abbey, Cornbury, Binsey Lane, Charlbury very fine.

6. Thame. Dorchester, Rycote, *Hb. Bx.* Albury.7. Thames. Ibstone, Stokenchurch, *A. Irvine*. Abundant in woods between Cumnor and Ibstone, Mongewell, Maple Durham, Sonning.

Berks. Wytham, Bagley Wood.

A beautiful shrub, whether in flower, in fruit, or showing in rich crimson and purple foliage in autumn.

V. Lantana, L. *Wayfaring tree.*

Top. Bot. 210. Syme, E. B. iv. 203. 640. Nym. 320. Bx. 128.

Native. Septal. Hedges. Common and generally distributed. Shrub. May, June.

First record, *Viburnum*, Park. *Blackstone MSS.* 1737.

1. **Stour.** Sibford.
 2. **Ouse.** Stoke Lyne, *E. Fry, Esq.* Mixbury, etc.
 3. **Swere.** Banbury very frequent, *A. Fr.*
 4. **Ray.** Upper Heyford and almost everywhere, *Bz.* Stow Wood, *Sib.* Marston Lane, Kirtlington.
 5. **Isis.** Tar Wood, South Leigh, Witney, *Sib.* About Walcot, and Charlbury plentiful, *Blackstone.* Wychwood, Burford, Handborough, Wolvercote, etc.
 6. **Thame.** Littlemore, Wheatley, Dorchester, etc.
 7. **Thames.** Caversham, *F. A. Lees.* Nuffield, etc.
- Berks.** Bagley, Wytham, etc.

SAMBUCUS. L.

S. nigra, L. *The Elder.*

Top. Bot. 207. Syme, E. B. iv. 199. 637. Nym. 321. Bx. 122.

Native. Sylvestral and septal. Common and generally distributed in woods and hedges throughout the county. Small tree. June, July. There is a tree in Radcliffe Square and one above the north turret on St. Mary's spire.

First record, 'with striped leaves,' at Cowley, *Plot*, 1657. *Sambucus acinis albis*, J. B. i. 546. White-berried elder observed by Dr. Plukenet and by Mr. Bobart in the hedges near Watlington, *Ray. Syn.* ed. i. 1690; also in Sir J. Locke's ground, Headington, *R. Walker*, doubtless planted.

Var. *S. laciniata* about Charlbury, where it is called feathered elder, *Blackstone*, 1747.

S. Ebulus, L. *Danewort.*

Top. Bot. 184. Syme, E. B. iv. 201. 638. Nym. 321. Bx. 122.

Denizen or native. Viatical, septal. Hedges, waysides. Local. Rather rare. Shrub. July-Sept.

First record, *Mr. Coles* in *Adam in Eden*, 1657.

2. **Ouse.** Tusmore Park, *G. Woodward.*

3. **Swere.** Hanwell by the foot-road, *Gull.* Near Hanwell grounds farm plentiful, *T. Bees. MSS.* Pen Hill, *R. French.* Between Milton and Bloxham, Lower Swalecliffe, *A. Fr.* Fields between Bloxham and Milton, *W. Coles.* Near Swalecliffe Mill.

4. **Ray.** Tackley Park, *Bz.* Parks behind Wadham Coll., *Sib.*, *Purton*, *T. Thurland*, 1860. Kirtlington Park and near Weston Peat Pits, *W. Wilson Saunders.* Holywell, *H. Bos.* Between Tackley and Whitehill, *G. Coles.* Weston-on-the-Green.

5. **Isis.** Eynsham, *Sib.* Do. *H. Bos.* 1856.

7. **Thames.** Little Stoke.

Berks. Wytham Wood! 'At Seckworth [Seacourt] is abundance of *Danewort* growing. This *Danewort* (say people) groweth from man's

blood, and that the Danes lived here is probably true. For they fought against Wytham Castle, standing upon not above halfe a mile from Seck-worth,' *T. Hearne, L. N. S.*, vol. ii. p. 586. Near Cholsey, *Newb.*

ADOXA. L.

A. Moschatellina, L. *Tuberous Moschatel.*

Top. Bot. 184. Syme, E. B. iv. 198. 636. Nym. 321. Bx. 42.

Native. Septal. Sylvestral. Woods and hedges on sandy soil.

Locally common. P. Mar.-May.

First record, *Sib.* 1794.

3. **Swere.** Wroxton, *O. V. Aplin.* Edgehill, *T. Bees.* Ford on road to Horley, *W. Patey.* Hornton, *T. Brayne.*

4. **Ray.** Lane near Stow Wood and Headington Wick Copse! On a heath between Barton and Stanton St. John! *Bz.* Bayswater, Elsfeld, Beckley Wood, Noke, Kirtlington Park.

5. **Isis.** South Leigh, woods near Ashford Mills, *Sib.* Fawler! *C. Walford.* Ditchley Park, *H. Bos.*

6. **Thame.** Shotover woods! *Sib.* North side Shotover with *Puccinia Adoxæ*, *Bz.*

Berks. Bagley Wood, Worton Heath, *Bz.* Cumnor, *H. Bos.* Tilehurst, *F. Tufnail.*

LONICERA. L.

* **L. Caprifolium, L.**

Comp. Cyb. 521. Syme, E. B. iv. 206. 641. Nym. 321.

Alien or denizen. Woods. Very rare. Shrub. June, July.

First record, *Rev. T. Butt* in *Sm. Fl. Br.* 1804, and first as British.

See also *Smith Correspondence*, vol. i. p. 438.

4. **Ray.** In a wood near Elsfeld plentifully. Common in Middleton Park, *Rev. E. Fox, M.A.*

5. **Isis.** By the lowest pond but one Cornbury, *T. Westcombe.*

7. **Thames.** Hartslock Wood, *Rev. E. Fox.* Maple Durham.

Berks. Bagley Wood, *Dyer.*

L. Periclymenum, L. *Honeysuckle. Woodbine.*

Top. Bot. 210. Syme, E. B. iv. 207. 642. Nym. 321. Bx. 287.

Native. Sylvestral, septal. Woods, thickets, hedges. Generally distributed, but not very common. Shrub. June-Aug.

First record, *Willian Jenner*, '*foliis quercinis*,' in *Merrett*, 1666, 'non procul Oxonio.'

In shady woods the young plants have usually lobed leaves, but the mature plants do not exhibit the same leaf outline.

** **L. Xylosteum, L.** *Fly Honeysuckle.*

Alien. Comp. Cyb. 521. Syme, E. B. iv. 208. 643. Nym. 322.

Great Tew, *A. Fr.* Middleton Park planted. Magd. Coll. Walks.

** *Symphoricarpos racemosus*, *M.* *Snowball.* Alien.

3. *Swere.* Old clay-pits Crouch Hill, remains of cultivation spreading itself freely, *A. Fr.* Near Steeple Aston, *B. Ogle, Esq.*

4. *Ray.* Rousham hillside; Mesopotamia.

5. *Isis.* Between Charlbury and Fawler. Naturalized.

6. *Thame.* Stanton St. John.

ORD. XL. RUBIACEÆ, *Juss.*

GALIUM. *L.*

G. Molugo, *L.* *G. elatum*, *Th.*

Top. Bot. 213. Syme, E. B. iv. 218. 650. Nym. 324.

Native. Septal. Hedges, etc. Common and generally distributed. P. July, Aug.

First record, *Sib.* 1794.

1. *Stour.* Near Stow Wood.

2. *Ouse.* Mixbury.

3. *Swere.* Broughton, Cropredy not common, *Bees.* Upper Tadmarton, *A. Fr.*

4. *Ray.* Stow Wood, *H. Bos.* Marston, Kirtlington. Common.

5. *Isis.* Wychwood, Woodstock, *H. Bos.* Freeland, Stonesfield, Minster Lovell, Handborough, etc.

6. *Thame.* Bullingdon, *H. Bos.* Dorchester.

7. *Thames.* Caversham, *F. A. Lees.* Chalk-pit near flowing spring.

Var. *G. scabrum*, North Stoke, Goring var. *G. scabrum.* *Rev. W.*

Newbould says two forms occur about Caversham.

Berks. Boar's Hill, Cumnor, etc.

Var. *G. Bakeri*, Syme.

Handborough, railside.

This *Galium* with *Vicia Cracca* form a great adornment of the hedges in the Ray and Isis district, and it is also abundant on railway banks in various parts of the county.

G. erectum, *Huds.*

Top. Bot. 212. Syme, E. B. iv. 217. 649. Nym. 324.

Native. Pascual. Dry pastures, etc. Rare or overlooked. P. June-Sept.

First record, *Sib.* 1794.

3. *Swere.* In the lane leading from Broughton toll-gate to the Castle on a bank, now cut down, *T. Bees.*

4. *Ray.* Stow Wood, *Rev. H. E. Fox.*

7. *Thames.* Henley, *Sib.* Do. *H. Bos.* 1856. Ipsden.

Bucks. Northants. Warwick.

G. saxatile, L. *Heath Bedstraw.*

Top. Bot. 212. Syme, E. B. iv. 219. 651. Nym. 327.

Native. Ericetal. Heathy ground. Local. June-Aug.

First record, *Sib.* 1794. *G. procumbens*, With.

1. Stour. Tadmarton Heath! *T. Bees.*

3. Swere. Furze-ground and on mole-hill near Hanwell, Hooknorton, *Gull.* North Newington, *T. Brayne.* Epwell Heath.

4. Ray. Gibraltar Rock, *T. Rogers.* Beckley, *Rev. Moyle Rogers.* Stow Wood, *H. Bos.!*

5. Isis. South Leigh, *Sib.* Wychwood, *H. Bos.* Burford, Ramsden Heath, North Leigh Heath.

6. Thame. Shotover, *Sib.* Culham.

7. Thames. Caversham, flowers transformed into leaves, *Hb. Br. Mus., J. Carroll.* Ipsden, Binfield, Chinnor Hill, Ipsden, etc.

Berks. Boar's Hill, Frilford, Bagley, etc., Childswell Farm, *Dillenius*, 1744.

G. uliginosum, L.

Top. Bot. 211. Syme, E. B. iv. 222. 655. Nym. 327.

Native. Paludal. Wet heaths, marshes. Local. P. July, Aug.

First record, *Sib.* 1794.

3. Swere. Broughton, bogs of Shutford Bridge, *T. Bees.*

4. Ray. Headington Wick! *H. Bos.* Marsh between Kirtlington and Tackley, Weston Peat Pits.

5. Isis. Eynsham Heath, *Sib.* Charlbury! *T. Westcombe.* Wolvercote.

6. Thame. Bullingdon, *Bx.* 1885.

7. Thames. Stokenchurch, *Sib.* Caversham.

Berks. Childswell Farm! specimen collected by *J. Dillenius*, 1730.

G. palustre, L.

Top. Bot. 211. Syme, E. B. iv. 221. 653. Nym. 328.

Native. Paludal. Marshes, ditches, etc. Common. P. June-Sept.

First record. In pratis udis prope S. Clement's, *Dillenius*, 1730.

Var. *G. elongatum* Presl. (Spec. Nyman.) Syme, E. B. iv. 653.

4. Ray. Near Lower Heyford, Marston Lane! *Newb.* Kirtlington.

5. Isis. Port Meadow, *H. Bos.* Wolvercote, common by riverside.

6. Thame. Sandford.

7. Thames. Caversham, South Stoke.

Var. *G. Witheringii*, Sm. Syme, E. B. iv. 654.

4. Ray. Otmoor, *A. Fr.!* Islip, Rousham, Charlton.

5. Isis. Port Meadow, *Rev. R. Linton.* Wolvercote, *Rev. F. Bennett*, Handborough, Bampton.

6. Thame. Christ Church Meadow, *H. E. Garnsey.* Ifley.

G. verum, L. *Yellow Bedstraw. Lady's Bedstraw.*

Top. Bot. 210. Syme, E. B. iv. 214. 658. Nym. 328. Bx. 294.

Native.. Pascual, Glareal. Dry pastures, field-borders, etc. Not uncommon. P. July, Aug.

First record, *Wm. Coles*, 1657, in *Adam in Eden*.

1. **Stour.** Tadmarton Heath, Sibford, etc.

2. **Ouse.** Hardwick, Mixbury, etc.

3. **Swere.** Butler's Close, Adderbury Town End, *Wm. Coles*. Hardwick, Broughton, *R. French*. Tadmarton Churchyard, *A. Fr.* Epwell Heath.

4. **Ray.** Between Middleton Stoney and Bicester, *A. Fr.* Stow Wood, Marston, etc.

5. **Isis.** Wychwood, *Rev. R. Linton*. Freeland, Bladon, St. Philip's Churchyard, Oxford, *Rev. F. Bennett*. Burford, etc.

6. **Thame.** Thame, *Hb. Bz.* Shotover, Iffley, Wheatley, etc.

7. **Thames.** Crookley Green, *A. Fr.* Goring, Caversham, etc.

Berks. Boar's Hill, Bagley, etc., with *Puccinia Galiorum*, *Bz.*

Var. *G. ochroleucum*, Syme. Very rare.

5. **Isis.** A few plants occurred by railside near Wolvercote.

G. tricoorne, With.

Top. Bot. 214. Syme, E. B. iv. 227. 659. Nym. 329.

Colonist. Agrestal. Cornfield. Rather common, especially on calcareous soil. A. July, Aug.

First record. *Aparine foliis brevioribus et semine laeviore*. Inter segetes et fabas variis locis agro Oxon. reperitur. *Morison (Bobart)*, iii. 332, 1699.

2. **Ouse.** Mixbury.

3. **Swere.** Barford.

4. **Ray.** Between Tackley and Northbrook, *Bz.* Headington (*G. spurium*) *Sib.* Kirtlington, Wheatley Road, etc., *Bz.*

5. **Isis.** Stanton Harcourt, South Leigh, *Sib.* Charlbury, Westcombe. Handborough.

6. **Thame.** Between Cowley Marsh and Rose Hill, *R. Walk.* Littlemore, Headington, *Dillenius*, 1740.

7. **Thames.** Stokenchurch, *Hb. Bz.* Aston Rowant, do., Woodcote, Mongewell, Grime's Dyke, Sunley Wood, etc.

G. Aparine, L. *Goose Grass. Cleavers.*

Top. Bot. 214. Syme, E. B. iv. 225. 658. Nym. 331.

Native. Septal. Hedgerows and waste places. Common in all the districts, in gardens in Oxford and on pollard willows in the Parks. A. May-Aug.

First record, *Sib.* 1794.

G. Cruciata, Scop. *Crosswort.*

Top. Bot. 211. Syme, E. B. iv. 213. 647. Nym. 331.

Native. Sylvestral and Septal. Woods and hedges. Locally common, but often absent from a considerable area. P. May, June.

First record, '*Cruciata* with striped leaves,' Plot, 1677.

Valantia Cruciata, L. Sib.

1. **Stour.** Common from Sibford to Tadmarton Heath.

2. **Ouse.** Stoke Lyne, *E. Fry*.

3. **Swere.** Huscote, *Miss Rusher*. Wykeham, Banbury, Crouch Lane, A. Fr. Tadmarton, Shutford, Epwell Common.

4. **Ray.** Headington Wick! *H. Bos.* Stow Wood, Bayswater.

5. **Isis.** Tar Wood, Wychwood! *Sib.* Plentifully about Charlbury, Blackstone, 1737! Godstow, *H. Bos.* Blenheim, *F. Rogers*. Ditchley, Tangley Wood, Tainton.

6. **Thame.** Shotover, *Bz.* Wheatley.

7. **Thames.** Caversham, *Newb.* Stokenchurch, *Hb. Bz.* Sunley, Wood, Vernal's Wood, Cowleaze Wood, Cane End.

Berks. Tubney.

ASPERULA, L.

A. odorata, L. *Woodruff.*

Top. Bot. 215. Syme, E. B. iv. 228. 660. Nym. 332. Bx. 46.

Native. Sylvestral. Woods and thickets. Rare about Oxford, common in the Chiltern Woods. P. May, June.

First record, *Sib.* 1794.

2. **Ouse.** Absent from N. E. part of county, *R. C. Pryor*.

4. **Ray.** Magd. Coll. Walks, probably introduced.

5. **Isis.** Copse on back of Evenlode, near Ashford Mills, *Bz.* Near Charlbury, *J. Albright*. Lees Rest Wood, *T. Westcombe*. Mill Wood, Ditchley Wood.

7. **Thames.** Goring, Whitchurch, College Wood, Woodcote, Chinnor, Withy Coppice, Aston Wood, Sunley Wood, Queen's Wood, Penley Wood, Stokenchurch Wood, Crowell, Vernal's Wood, Nettlebed, Mongewell.

Berks. Bagley, *Bz.* Unwell Wood.

A. cynanchica, L. *Quinancy wort.*

Top. Bot. 215. Syme, E. B. iv. 229. 661. Nym. 333.

Native. Glareal. Dry calcareous soil. Local. Occurs on oolite and chalk. P. June, Aug.

First record, *Dillenius*, 1740.

2. **Ouse.** Cottisford Heath, *T. Brayne*.

4. **Ray.** On the Leys, Upper Heyford, *Bz.* Gibraltar Rocks, *F. Rogers*.

5. **Isis.** Southcombe Common, *T. Bees*. Wychwood, *Sib.* do.

- Hb. Lawson.* Charlbury, *T. Westcombe.* Leafield, Stonesfield, *H. Bos.* Tainton Quarries.
6. *Thame.* Bullingdon Green, *Sib.*! 1885. Near Oxford, *Rev. W. Bree in Purton.* Headington Quarry, *R. Walk.*
7. *Thames.* Stokenchurch, *Dillenius.* Near Henley, etc., *Dr. Lightfoot.* Causham Hill, note in *Johns. Merc. ex W. Pamplin*; do. col. *J. Carroll in Hb. Br. Mus.* Lewknor, *A. Fr.* Goring, Whitchurch, Chinnor, Beacon Hill, Shirborne, Swincombe, etc.
- Berks.* Streatley, *H. Bos.* Dorchester Clump, *Rev. F. Bennett.* Lowbarrow, Unwell Downs. Bucks, Northants, Gloster, Warwick, one locality in cornfields near Wilmoote.

SHERARDIA. *Dillenius.*

- S. arvensis*, *L.* *Field Madder, Spur Wort.*
- Top. Bot. 215. Syme, E. B. iv. 331. 663. Nym. 335.
- Native. Agrestal. Cultivated fields. Rather common and generally distributed. B. April-Oct.
- First record, *Sib.* 1794.
- With white flowers at Handborough, 1884.

ORD. XLI. VALERIANEÆ, D C.

VALERIANA. *L.*

- V. officinalis*, *Small Valerian.*
- V. Mikani*, Reich. Ic. Top. Bot. 215. Nym. 336.
- Native. Sylvestral. Dry woods. Local, but widely distributed. P. June-Aug.
- First record, *Blackstone* 1737. *V. sylv. fol. angust.* is probably this.
- First certain record, *the Author, Rep. of Rec. Club*, 1883.
2. *Ouse.* Ardley.
4. *Ray.* Stow Wood, *Sib.* Probably this, but both species are found here.
5. *Isis.* In several parts of Wychwood and in Ditchley Wood, plentifully! *Blacks.*
6. *Thame.* Nuneham.
7. *Thames.* Mongewell, Stokenchurch, Penley Wood, Maple Durham, *Rep. of Rec. Club*, 1880.
- Berks.* Unwell Wood, Streatley Wood, *Rep. of Rec. Club*, 1883.
- V. sambucifolia*, Mik. *Great Valerian.*
- Top. Bot. 215. Syme, E. B. iv. 236. 666. Nym. 336.
- Native. Paludal. Wet places, riversides, etc. Frequent and generally distributed. P. June-Aug.

First certain record, *the Author*, 1879. It occurs by all our rivers and streams; at Osney it is plentiful, and elsewhere about Oxford. The submerged leaves are very different in appearance; one is preserved in the Dillenian herb. as a *Potamogeton*.

V. dioica, L. Marsh Valerian.

Top. Bot. 215. Syme, E. B. iv. 238. 668. Nym. 336.

Native. Paludal. Marshes, wet meadows. Locally common. P. April-June.

First record, *Sib.* 1794.

2. Ouse. Stoke Lyne, *E. Fry*.

3. Swere. Drayton Lane, Hanwell oak plantation, not common, *Bees*. Canalside, Twyford, *A. Fr.* Drayton meadow, *O. V. Aplin*.

4. Ray. Upper Heyford, *Bz.* 1831! Headington Wick, *Sib.*! Bayswater, Noke, Marshes and Canalside between Lower Heyford and Kirtlington frequent, Weston Peat Pits, fields opposite Mesopotamia.

5. Isis. Cornbury, *T. Westcombe*. Wychwood! *H. Bos.* Grafton Common, Canalside above Wolvercote.

6. Thames. Bullingdon Green! *Sib.* Waterstock Mill, *A. Fr.* Albury, Littlemore, Shotover.

7. Thames. Little Stoke, Stokenchurch, *Hb. Bz.*

Berks. Frilford, Kennington.

CENTRANTHUS. DC.

* *C. ruber*, DC. Wall Valerian.

Comp. Cyb. 224. Syme, E. B. iv. 232. 664. Nym. 337. *Bz.* 90.

Valeriana rubra, L. Alien. Old walls in Oxford. Rare. Merton Coll. walls, *Sib.* With white flowers on Merton walls, *Bz.* do. *Bree* in *Purton*. Wadham walls.

7. Thames. Chalk-pit, Caversham, *Hb. Br. Mus. col. A. Fr.*

VALERIANELLA. Hall.

V. olitoria, Poll. Lamb's Lettuce.

Top. Bot. 216. Syme, E. B. iv. 240. 669. Nym. 339.

Native. Agrestal, etc. Fields, banks, dry places. Local, not common. A. April-July.

First record, *Sib.* 1794. *Valeriana Locusta*, L.

3. Swere. Drayton Lane, Adderbury, *Gull*. Broughton Fulling Mill, Tadmarton lime-pit, *T. Bees*, rare. Near Banbury, *J. Colegrove*. Shutford, with white flowers.

4. Ray. Stow Wood, Headington, *H. Bos.* Kirtlington, Northbrook Bridge, Middleton Stoney.

5. *Isis*. Godstow, *Prof. Daubeny*, 1841. Cornbury, *T. Westcombe*. Canalside near Hythe Bridge, Charlbury.
6. *Thame*. Between Asylum and Shotover, wall in Rose Lane, Wheatley, *Bz.* Iffley, *H. Ridley*. Littlemore, Stanton St. John.
7. *Thames*. Henley cornfields, common, *Bz.* Caversham, *Hb. Br. Mus. H. Trimén*. Goring, Woodcote, Watlington, Mongewell, Sonning, Maple Durham, Henley Park Hill, Stokenchurch, abundant on the chalk.

Berks. Cumnor, Ferry Hinksey, Frilford.

V. dentata, Poll.

Top. Bot. 217. Syme, E. B. iv. 243. 672. Nym. 217.

Colonist. Agrestal. Cultivated fields. Widely, but locally distributed.

A. June-Sept.

First record, *W. Baxter*, 1833.

3. *Swere*. Broughton Fulling Mill, *A. F.* 1865. Worton, near Somerton, *A. Fr.*

4. *Ray*. Between Upper Heyford and the Leys, *Bz. MSS.* Cornfields between Kirtlington and Middleton, *W. W. Saunders*. Headington Wick, *H. Bos.* Noke.

5. *Isis*. Between Charlbury and Enstone, *Hb. Br. Mus. A. Fr.* Cornfields about Church Handborough, 1883, *Bz.* Near Chipping Norton, *Bees*. Stonesfield, Ditchley, etc.

6. *Thame*. Roadside between Shotover and Bullingdon Green, *Walk.* Stanton St. John, *H. Bos.* Headington, Culham.

7. *Thames*. Caversham, *Newb.* Henley, *Hb. Bz.* Mongewell, Goring, common on the chalk.

Berks. Cumnor, Wargrave, Elcot.

Var. mixta, Duf.

5. *Isis*. Fawler, *T. Westcombe*. Stonesfield.

6. *Thame*. Bullingdon Green, 1853, *Bz.*

7. *Thames*. Henley.

V. carinata, Lois.

Syme, E. B. iv. 241. 670. Comp. Cyb. 523. Nym. 339. Bx. 432.

Denizen. Agrestal. Cultivated ground. Rare. A. June-Aug.

4. *Ray*. On a wall in Rose Lane opposite Bot. Gard., May 21, 1841, *Bz.*, from which Baxter's plate was figured.

6. *Thame*. Iffley, *W. Mathew, M.A.*, see *Rep. of Rec. Club*, 1883. Littlemore. Not recorded for the border counties.

*** V. rimosa, Bast. V. Auricula, DC.**

Syme, E. B. iv. 241. 671. Nym. 339.

Denizen or casual. Cultivated fields. Extremely rare. A. July.

3. **Swere.** A solitary specimen in allotments at Tadmorton Heath,
A. French, 1876.
 Gloster, E. Northants. Warwick.

ORD. XLII. DIPSACEÆ, DC.

SCABIOSA. *L.*

S. Columbaria, *L.* *Small Field Scabious.*

Top. Bot. 219. Syme, E. B. iv. 251. 678. Nym. 343.

Native. Pascual. Dry pastures. Local. Not very common. P.

June-Aug.

First record, *Sib.* 1794.

1. **Stour.** Tadmorton Heath, *T. Bees.*

2. **Ouse.** Mixbury.

3. **Swere.** Bretch, Broughton, Crouch Lane, *Bees.* Lower Tadmorton,
R. Walford.

4. **Bay.** Upper Heyford, Northbrook Bridge, Stow Wood, and Beckley,
Bx. MSS. Elsfield, Headington Wick, Beckley.

5. **Isis.** Near Ashford Mills, *Bx.* Wychwood, near Witney and
 Burford, *H. Bos.* Stonesfield.

6. **Thame.** Bullingdon Green! *Sib.* Cheney Lane, Shotover, *Bx.*
 Horspath, Wheatley, Woodperry.

7. **Thames.** Grime's Dyke, Beacon Hill, Mongewell, Sonning, Chinnor,
 etc. Abundant on the chalk where not overlaid by tertiary
 deposits.

Berks. Happy Valley, Buckland, *H. Bos.*

Var. *alba* on Ewelme Downs.

SUCCISA. *Mch.*

S. pratensis, *Mch.* *Devil's Bit Scabious.*

Scabiosa succisa, *L.*

Top. Bot. 219. Syme, E. B. iv. 250. 677. Nym. 345. Bx. 277.

Native. Pascual, ericetal. Moist woods, pastures, heaths. Rather
 common and widely distributed. P. Aug.-Oct.

First record, *Sib.* 1794.

2. **Ouse.** Mixbury, Hethe, Hardwick, etc.

3. **Swere.** Bretch, *Bees.* Banbury, etc., *A. Fr.*

4. **Bay.** Headington Wick, *H. Bos.* Marston, Beckley, Lower Heyford,
 etc.

5. **Isis.** Wychwood, *H. Bos.* North Leigh Heath, Freeland, Kington,
 etc.

6. **Thame.** Shotover, Bullingdon, Marsh Baldon, Albury, etc.

7. **Thames.** Binfield, Mongewell, College Wood, etc.

Berks. Hinksey, Bagley, Frilford.

With dingy white flowers near Mongewell.

DIPSACUS. L.

D. sylvestris, L. *Teasel.*

Top. Bot. 218. Syme, E. B. iv. 245. 674. Nym. 345. Bx. 490.

Native. Septal, etc. Hedges, waysides, thickets. Common, particularly on clayey soil, throughout the county. B. July-Sept.

First record, *Sib.* 1794.

D. pilosus, L. *Shepherd's Rod. Small Teasel.*

Top. Bot. 219. Syme, E. B. iv. 218. 676. Nym. 345.

Native. Septal. Damp hedgesides, thickets. Local and rare. B. July-Sept.

First record, *Sib.* 1794.

3. **Swere.** Whichford Wood, *T. Ward*, Near Bodicote Mill, *Mrs. Perry, Bees. MSS.* Somerton, *H. Bos.*

4. **Ray.** Bayswater, *Bx.* Heyford, *H. Bos.*

6. **Thame.** Near Thame Park, *Sib.*

Berks. Marcham, Sonning! Bessilsleigh, Stanmore, etc., *Brit.*

TRICHENRA. Schrad.

T. arvensis, Sch. *Field Scabious.*

Scabiosa arvensis, L. Knautia arvensis, Coult.

Top. Bot. 220. Syme, E. B. iv. 252. 679. Nym. 347. Bx. 179.

Native. Agrestal. Cultivated fields. Common and generally distributed. P. June-Aug.

First record, *Sib.* 1794.

With white flowers at Headington Wick; an entire leaved form occasionally occurs.

ORD. XLIII. COMPOSITÆ, L.

BIDENS. L.

B. cernua, L. *Nodding Bur Marigold.*

Top. Bot. 248. Syme, E. B. v. 93. 763. Nym. 348.

Native. Paludal. Pondsides, wet places. Local and rare. A. July-Sept.

First record, *Sib.* 1794, and var. *minima, L.*

3. **Swere.** Upper Heyford, Marston, *Rev. E. Fox.*

5. **Isis.** Eynsham, *H. Bos.*

6. **Thame.** North side of Shotover, var. *minima, L., Sib.*

7. **Thames.** In ditches parallel to the river north of Isis and west of Caversham! With var. *radiata, Syme. Rep. of Rec. Club, 1883.*

Its scarcity in Oxford is remarkable.

Berks, near Reading. Bucks, Napford Common. Northants very rare.
Gloster, W. Warwick.

B. tripartita, L.

Top. Bot. 249. Syme, E. B. v. 94. 764. Nym. 348. Bx. 446.

Native. Paludal. Marshy places, ditches, etc. Much more frequent than *cernua*. A. July-Sept.

First record, *Sib.* 1794.

3. Swere. Canalside, Banbury, *A. Fr.*

4. Ray. Bicester, *H. Bos.* Fencott, *Rev. Moyle Rogers.* Otmoor, Upper Heyford, Marston.

5. Isis. Eynsham, Hinksey, *H. Bos.* Binsey, Port Meadow, Wolvercote.

6. Thame. Dorchester, *Rev. F. Bennett.* Thame, *Hb. Bx.* Waterperry, *A. Fr.*

7. Thames. Mongewell, Maple Durham.

DORONICUM. L.

* **D. plantagineum, L.** *Leopard's Bane.*

Comp. Cyb. 534. Nym. 350. Syme, E. B. v. 92. 772.

Alien. Relic of cultivation. Rare. June, July.

4. Ray. Middleton Stoney, *F. Rogers.*

5. Isis. New Yatt near Witney, *F. Westell* and *H. Bos.*

6. Thame. Brightwell Grove, *Mr. Munton.*

SENECIO. L.

S. campestris, DC.

Cineraria campestris, Retz. Top. Bot. 257. Syme, E. B. v. 89. 760. Nym. 353. Bx. 206.

Native. Glareal. Dry pastures and downs. Very local and rare. May.

First record, *Jacobæa minima montana lanuginosa foliis brevibus subrotundis, in glabretis prope Burford, Morrison, 1699.*

5. Isis. Burford, as above. Do. *Sir H. Parker.* Do. *Sib.*, etc. Burford on the road to Cirencester near the fourth milestone, south-east side of Wootton field, about two miles from Woodstock, *Dr. Lightfoot MSS.* Both localities now enclosed and the plant destroyed. Near Charlbury, *J. Albright.* It may still exist on Lynham Camp.

7. Thames. Mongewell on Grime's Dyke, *C. integrifolia, Sib.* Still there in 1885. Stokenchurch Hill, *E. Witts, Esq.*, 1836, *Bx.*

Berks. Compton, Ilaley and Streatley Downs still fairly common, *Bx.* Plate was drawn from a Streatley specimen. Bucks. Northants, Wittering Heath, probably extinct. Gloster.

* *S. saracenicus*, L.

Comp. Cyb. 514. Syme, E. B. v. 87. 757. Nym. 353.

Denizen. Occurs sparingly in plantations, nowhere indigenous. P. July, Aug.,

First record, *Dr. Williams MSS.* 1831.3. *Swere*. Hanwell plantation, *A. Fr.* 1872.6. *Thame*. Shotover plantation, *Dr. Williams, Baxt. in Walk., etc.*
Last seen 1866.*S. aquaticus*, Huds.

Top. Bot. 256. Syme, E. B. v. 86. 756. Nym. 355.

Native. Inundatal. Marshes, wet meadows, etc. Common and generally distributed. P. July-Sept.

First record, *Sib.* 1794.

The outline of the leaf varies considerably.

S. Jacobsen, L. *Common Ragwort.*

Top. Bot. 256. Syme, E. B. v. 85. 755. Nym. 355.

Native. Pascual. Pastures, roadsides, etc. Common and generally distributed. P. July-Sept.

First record, *Sib.* 1794.*S. erucifolius*, L.

Top. Bot. 256. Syme, E. B. v. 84. 754. Nym. 356.

Native. Viatical. Woods, hedges, waysides. More frequent on stiff clay and chalk. P. July-Sept.

First record, *Sib.* 1794, *S. tenuifolius*, J.3. *Swere*. Beyond N. Newington, *Bees*. Broughton, Milton, *A. Fr.* Bloxham, etc.4. *Ray*. Between Middleton Stoney and Fritwell, *A. Fr.* Between Bicester and Blackthorn, *H. Bos.* Bletchingdon, Charlton, etc.5. *Isis*. Minster Lovell, Woodstock, etc.6. *Thame*. Between Bullingdon and Shotover, between Oxford and Cowley Marsh, *Bz.* Between Wheatley and Thame, *Wm. Whitwell.* Albury.7. *Thames*. Chalk-pit near Henley, *A. Fr.* Goring, Ipsden, Woodcote, etc.*Berks.* Near the Hinkseys, Botley to Cumnor, *Bz.* Bessilsleigh.*S. squalidus*, L. *Oxford Ragwort.**S. chrysanthemifolius*, Poir.

Comp. Cyb. Oxford, 534. Syme, E. B. v. 83. 753. Nym. 357.

Bx. 52.Denizen. Old walls and waste ground. Abundant about Oxford. *A., B. or P.* April-July.

First record. Sub ipsis denique muris urbis rariores stirpes oculis occurrunt, quæ tamen cum peregrina sint facie, dubito utrum inter indigenas enumerandæ sint, e. g. *Hieracium cerinthoides*, *Senecionis* species, et *Cymbalaria* quæ late se propagans undequaque prorepat, et tapetis instar circa rudera et antiquiores muros sternitur, *Sib.*, *preface*, viii. Specimen in *Herb. Sherard.* dated 1799. Do. in *Hb. Br. Mus.* 1805, *Ed. Forster. W. Christy, Jun.*, 1832. In *Comp. Cyb. Br.* Walls, Oxford, *Rev. W. T. Bree*. Although not a native it has become naturalized on every wall in and about Oxford, *Purt. add.* i. Plentiful on every wall in and about Oxford. Dillenius sent seeds of this to Linnæus from the Oxford Garden, *Walk.* Very plentiful in and about Oxford, where it was first noticed by Sir Joseph Banks. Dillenius sent seeds to Linnæus, but whether he gathered them from the Oxford Garden or wall of the town no memorandum exists. It is not improbable that the plant was originally naturalized from the Garden, being really a native of Sicily, *Sm. Eng. Fl.* Geo. Don noticed it at Oxford in 1816. See spec. in his fasciculus. See also *Bab. Man., Hooker's St. Flora, Eng. Bot., Baxter, etc., etc.* It is still abundant about Oxford, not only on old walls, but on waste ground, especially by the railway, from whence seeds are carried by trains to various places along the line, as to Littlemore, Reading, etc.

It is described in the Student's Flora as glabrous, but the young plants are thinly covered with shaggy hairs. It is in full bloom in May, but specimens in flower may be seen from March to November. The leaves vary very much in outline, from subentire to deeply pinnatifid; when bruised they are aromatic. In the Brit. Mus. Herb. is a specimen collected by *W. T. Dyer*, var. *parviflorus*, site of old workhouse, Jericho, 1867. In this variety the flower heads are one half the normal size, being half instead of one inch across, while the foliage is very slightly smaller than usual. The dried flowers have very much the appearance of the rayed form of *S. vulgaris*. Mr. Dyer proposed the name *parviflorus* for this var. It grew sparingly amongst thousands of the normal form. See *Rep. of Lond. Ex. Club*, 1867.

The specific name *squalidus* is very inappropriate, the name adopted in the Prodrômus is much more fitting, *S. chrysanthemifolius*, Poir. Our Oxford plant is referred by De Candolle to the var. *latilobus*, De Cand. In *Anglia circa Oxon.* 'Banks.' It is very variable.

* *S. crassifolius*, W. Nym. 357.

Denizen. Waste ground in and about Oxford. A. May, June. First record, *the Author*, 1884, and first as English.

5. *Isis*. On waste ground at Osney, near Folly Bridge, 1884, near Wolvercote brickyard, *Mr. Frost*, 1885. Between L. N. W. R. and G. W. R. Station 1885, Canalside near Hythe Bridge, Riverside near Hertford Barge in Christ Church Meadow.

S. vernalis, W. K. Nym. 357.

Denizen. Waste ground about Oxford. Rare. A. May, June.

First record, *the Author*, 1884.

Waste ground Osney, do. near the Railway Station, near the Tennis Court, Norham Gardens, *F. T. Richards*!

[*S. viscosus*, L. Syme, E. B. v. 82. 752. Top. Bot. (?) 23.

First and only record, 'near Baldon,' *Sib*. This was almost certainly the viscid form of *S. sylvaticus*, L., which still occurs there.]

S. sylvaticus, L.

Top. Bot. 255. Syme, E. B. v. 81. 750. 751. Nym. 358.

Native. Glareal and ericetal. Heaths and dry sandy soil. Rather local. A. July-Sept.

First record, *Sib*. 1794.

1. Stour. Tadmorton Heath, *Bees*.! *Sib*ford.

2. Ouse. Hethe.

3. Swere. Epwell Heath! Crouch Hill, Springe Hill, rare, *T. Bees*. Tadmorton.

4. Ray. Headington Wick, *H. Bos*. Stow Wood, Upper Heyford.

5. Isis. South Leigh Heath, Eynsham Heath, *Sib*. Freeland, North Leigh.

6. Thame. Shotover! *Bx. MSS*. Magdalen Wood, Culham, Church Baldon.

7. Thames. Nettlebed, Chinnor, Woodcote, Binfield, etc. Frequent on the sandy commons of the Chilterns, and especially abundant after the Furze has been cleared.

Berks. Frilford, Tubney, Bagley, Wootton, Boar's Hill, etc.

The form *lividus* Sm. non. L. also occurs; the upper leaves have larger auricles than the type. It is the *auriculatus* of Meyer.

S. vulgaris, L. *Groundsel*.

Top. Bot. 255. Syme, E. B. v. 80. 749. Nym. 358.

Native. Agrestal. Cultivated ground and waste places. Ubiquitous.

A. Jan.-Dec.

First record, *Sib*. 1794.

Var. *S. radiatus*, Koch. Near Osney and Folly Bridge on waste ground, with type and *squalidus*.

ANTHEMIS. L.

A. nobilis, L. *Chamomile*.

Top. Bot. 261. Syme, E. B. v. 53. 724. Nym. 358.

Native. Pascual. Heathy ground. Very rare. P. June-Sept.

First record, *Sib*. 1794.

4. Ray. Otmoor, *Sib*.

5. **Isis.** South Leigh Heath near the Hill House, *Sib.*
6. **Thame.** Cornfield on the north side of London Road between Oxford and first milestone, *Hb. Bx.* 1835, extinct.
7. **Thames.** Stoke Row Common, Woodcote Heath, native.
- Berks.** Virginia Water. **Bucks.** Napford Common. **Warwick.**

A. arvensis, L. *Corn Chamomile.*

Top. Bot. 261. Syme, E. B. v. 51. 721. Nym. 361.

Native. Agrestal. Cornfields, not unfrequent on the chalk, local in other districts. A. May-July.

First record, *Sib.* 1794.

3. **Swere.** Hanwell Field, Constitution Hill, field near Bodicote Parsonage, Wickham Lane, *T. Bees.* Crouch Hill, *A. Fr.*
4. **Ray.** Between Kirtlington and Bletchingdon, *W. Wilson Saunders.* Between Somerton and Middleton, *A. Fr.* Near Ireton Hill, Bayswater, Headington near the London Road, *R. Walker.*
5. **Isis.** Between Church and Long Handborough, *Bx.* Abundant 1833!
6. **Thame.** Near Warneford Asylum, *H. Bos. in Phyt.* iv. 101. Tunbridge Field, Stanton St. John, *Walk.*
7. **Thames.** Goring, Nuffield, Watlington, Binfield, Crowmarsh, Woodcote, Stoke Row, Caversham, Kidmore End, Chinnor, Crowsley, Cane End. Replaces to a great extent *M. Chamomilla*, etc., on the chalk.
- Berks.** Foxcombe, *H. Garnsey.* Frilford, Botley Pound, *J. Bennett,* 1812. **Streatley,** Basildon.

A. Cotula, L. *Mather. Stinking May-Weed.*

Top. Bot. 262. Syme, E. B. v. 49. 720. Nym. 362. Bx. 328.

Native. Agrestal. Cultivated fields and waste places. Generally distributed and locally common. A. June-Oct.

First record, *Sib.* 1794.

This plant is detested by reapers, whose hands and legs frequently get blistered by it.

* * *Anacyclus radiatus, Lois.* Nym. 363.

Var. *purpurascens, DC.*

Alien. Waste ground. Wolvercote, 1883.

ACHILLEA. L.

A. Ptarmica, L. *Sneezewort.*

Top. Bot. 263. Syme, E. B. v. 59. 727. Nym. 364. Bx. 36. *Ptarmica vulgaris, DC.*

Native. Pratal. Damp meadows and streamsides. Generally distributed in **Thames** and **Cherwell** districts.

First record, *Sib.* 1794.

3. **Swere.** Banbury, *A. Fr.*, *Bees.*, etc.

4. **Ray.** Kirtlington, *H. Bos.* It grows to a very large size and with a yellowish tinge to the flowers in the meadows by the side of Cherwell, *W. Wilson Saunders, Mag. Nat. Hist.* vol. iii. n. s. p. 239. Otmoor, with large flowers. The Parks.

5. **Isis.** Godstow, *H. Bos.* Bladon, *Rogers.* North Leigh, Port Meadow, Bampton, etc.

6. **Thame.** Nuneham, *H. Bos.* Iffley, Albury, Thame, *Hb. Bx.* Dorchester.

7. **Thames.** Mongewell, Maple Durham, Caversham, etc.

Berks. Bablock Hithe, *H. Bos.* Radley, etc.

A. Millefolium, L. *Yarrow.*

Top. Bot. 263. Syme, E. B. v. 57. 727. Nym. 366.

Native. Pascual. Pastures, roadsides, etc. Very common and generally distributed. P. June-Sept.

First record, *Sib.* 1794.

With purple flowers at Nettlebed, Goring, etc., and very pubescent foliage at Stonesfield.

CHRYSANTHEMUM. L.

C. segetum, L. *Corn Marigold.*

Top. Bot. 259. Syme, E. B. v. 40. 713. Nym. 370. Bx. 306.

Colonist. Agrestal. Cultivated fields on sandy soil. Locally common. June-Nov.

First record, *Sib.* 1794.

1. **Stour.** Tadmarton, etc.

3. **Swere.** Hanwell, Tadmarton, Drayton, Milton, abundant, *A. Fr.*

4. **Ray.** Headington Wick, Elsfield, Stow Wood, etc.

5. **Isis.** South Leigh.

6. **Thame.** Shotover, *Hb. Lawson.* Teddington, *A. Fr.* Thame, *Hb. Bx.* Nuneham, Cuddesdon, Horsepath, etc.

7. **Thames.** Mongewell.

Berks. Boar's Hill, Tubney.

C. Leucanthemum, L. *Ox-eye Daisy. Moon-daisy.*

Top. Bot. 259. Syme, E. B. v. 41. 714. Nym. 371. *Leucanthemum vulgare*, Lam.

Native. Pascual. Fields, etc. Abundant and generally distributed. P. May-July.

First record, *Sib.* 1794. In a pasture where this was growing abundantly the cattle had eaten the grass, etc., but left this untouched, *Bx. MSS.* Very fine by riverside between Bablock Hithe and Eynsham.

One specimen was gathered which had 162 expanded heads on it, and some of these measured two and a-half inches across.

PYRETHRUM. G.

* *P. Parthenium*, Sm. *Feverfew*.

Matricaria Parthenium, L. *Chrysanthemum Parthenium*, Pers.

Top. Bot. 260. Syme, E. B. v. 43. 715. Nym. 372. Bx. 20.

Denizen. Walls and waste places. Rare. P. July, Aug.

First record, *Sib.* 1794.

3. *Swere*. Frequent Banbury Bridge, Oxford Road, *Bees*. Drayton, *R. French*. Adderbury West, Shutford Priory, *T. Brayne*. Near Hardwick toll-gate, *Miss Rusher*. Dalby's Wharf, *A. Fr.* Barford St. John.

4. *Ray*. Headington, near the 'Black Boy,' on a wall in the lane leading to Barton, *R. Walk*. Between the Parks and Summertown, *Bz.* 1831! *Magd.* Coll. Walks.

5. *Isis*. St. John's Coll. Walls! rather rare about Oxford. A little way out of Woodstock on the Stonesfield Road, *Bz.* Yarnton, *T. Thurland*. Godstow! *H. Bos.* North Leigh, waste ground near Canal, Oxford, near Ashford Mills.

6. *Thame*. Waterstock, *A. Fr.* Great Milton, Great Haseley, Nuneham.

7. *Thames*. *Flore pleno* Caversham, *A. Fr.*

Var. *P. parthenifolium*, W. Walls Thame, *A. Fr.*

MATICARIA. L.

M. inodora, L.

Top. Bot. 260. Syme, E. B. v. 46. 717. Nym. 374.

Native. Agrestal, etc. Fields, waysides, etc. Generally distributed.

A. June-Nov.

First record, *Sib.* 1794. *Chrysanthemum inodorum*, L.

M. Chamomilla, L. *Wild Chamomile*.

Top. Bot. 260. Syme, E. B. v. 48. 719. Nym. 374. Bx. 335.

Native. Agrestal. Cultivated fields, etc. Generally distributed and locally common. A. June-Aug.

First record, *Sib.* 1794.

TANACETUM. L.

T. vulgare, L. *Tansy*.

Top. Bot. 260. Syme, E. B. v. 44. 716. Nym. 375. Bx. 34. *Chrysanthemum Tanacetum*, Reich.

Native. Viatical. Roadsides and waste places. Local, rather rare.

P. July-Sept.

First record, *Sib.* 1794.

2. **Ouse.** Finmere, Mixbury, *R. C. Pryor*.
3. **Swere.** The record in the Banbury List Mr. Beesley has subsequently discovered was erroneously made by the recorder. Between Milton and Adderbury, *A. Fr.*
4. **Ray.** Headington Wick Copse, *R. Walker* in *Bz.* Between Barton and Stow Wood, *T. Thurland*. Banks of Cherwell, *Rev. E. Fox*. Near Woodstock Road Station.
5. **Isis.** South Leigh, *Sib.*
6. **Thame.** Shotover Hill! *Sib.*
7. **Thames.** Thame, *Hb. Bz.* Caversham, *H. Bos.* Christmas Common, Stokenchurch, near Stoke Row, Ipsden, Nettlebed, near Shirburn, Woodcote.
- Berks.** Foxcombe Hill, *H. Bos.* Near Kennington, *Bz.* Appleton, Maple Durham, near the 'Roebuck,' *F. Tufnail*.

ARTEMISIA. L.

* **A. Absinthium, L.** *Wormwood.*

Top. Bot. 251 (error). Syme, E. B. v. 61. 731. Nym. 376. Bz. 339. Denizen. Viatical. Waste places. Often a relic of cultivation. Rare.

P. July-Sept.

First record, *Sib.* 1794.

5. **Isis.** Near Ashford Mills.

6. **Thame.** Headington Quarries, *Hb. Bz.* Shotover, Bullingdon, *H. Bos.*

7. **Thames.** Caversham, *Newb.*

Berks. Appleford, Denford, Wellington College, *Brit.* Northants, Duston. *Gloster.*

A. vulgaris, L. *Mugwort.*

Top. Bot. 252. Syme, E. B. v. 62. 732. Nym. 378.

Native. Septal. Hedges, field-borders, etc. Common and generally distributed. P. July-Sept.

First record, *Sib.* 1794.

Between Caversfield and Bicester a form occurred near *A. coarctata*, Fors. See *Reich. Fl. Germ.* 1038, and is identical with the condition assumed by the original plant of that variety found by Mr. Bagnall.

GNAPHALIUM. L.

G. uliginosum, L. *Marsh Oudweed.*

Top. Bot. 253. Syme, E. B. v. 72. 741. Nym. 382.

Native. Damp places, roadsides, dry ditches, etc. Common and generally distributed. A. July-Oct.

First record, *Sib.* 1794.

I have been unable to find the var. with hairy achenes, *G. pilulare*, *Wahl.*, although many hundreds of specimens have been examined.

G. sylvaticum, L. *Heath Cudweed.*

Top. Bot. 253. Syme, E. B. v. 74. 743. Nym. 382.

Native. Ericetal. Dry heathy pastures. Local and rare. P. July-Sept.

First record, *Sib.* 1794. *G. rectum.*

1. **Stour.** Tadmarton Heath, *A. Bees.*

3. **Swere.** Epwell Heath, *T. Bees.*

4. **Ray.** Stow Wood, *Sib.* Ground near Bog under Headington Wick Copse, 1860, *Bz.*

6. **Thame.** Shotover, *Sib.* North-west side of Shotover, 1885.

7. **Thames.** Crowell Hill, Ibstone Common, Nettlebed. It may be seen in a barren state on some other Commons on the Chilterns.

Berks. Bagley Wood, *Bz.*

G. dioicum, L. *Mountain Everlasting.*

Top. Bot. 252. Syme, E. B. v. 78. 747. Nym. 383. *Bz.* 243.

Antennaria dioica, Br. Native. Ericetal. Heaths. Very rare or extinct.

First and only record, *Sib.* 1794.

7. **Thames.** Woodcote Heath.

It may yet be found on the chalk escarpment of the Chilterns.

Berks. Blewbury Downs, Hills at Hampstead Norris, Ridgway, *Brit.*

No recent record, Northants, 1878, very rare.

FILAGO. L.

F. spathulata, Pr.

Top. Bot. 254. Syme, E. B. v. 69. 738. Nym. 384.

Native. Glareal. Dry fields and roadsides. Local. A. July-Sept.

First record, *W. Mathews* in *Phyt.* vol. iv. 134, 1853.

5. **Isis.** Woodstock roadside, *W. Mathews.* Witney, *F. T. Richards.*

7. **Thames.** Goring, *Newb.*, showed to him by *Dr. Boswell Syme.* Bix, Chinnor.

Berks. Wootton, Tubney, *Rep. of Rec. Club*, 1881. Bucks, Hambleton, Bledlow, *Rep. of Rec. Club*, 1883.

F. germanica, L. *F. canescens, Jord.*

Top. Bot. 253. Syme, E. B. v. 67. 736. Nym. 384.

Native. Glareal, etc. Dry cultivated fields, waste ground, roadsides, etc. Not very common. A. June-Sept.

First record, *Sib.* 1794.

1. **Stour.** Tadmarton Heath, *A. Fr.*

2. **Ouse.** Mixbury, Hardwick.

3. **Swere.** Crouch Lane, *Bees.* Hanwell, *R. French.* Adderbury, *Gull.*

4. **Ray.** Near Middleton Stoney, *A. Fr.* Headington Wick.

5. *Isis*. Charlbury, *Rev. R. Linton*. Burford, Wychwood, on a wall top in Bampton, etc.
6. *Thame*. Thame, *Hb. Bz.* Bullingdon, Shotover, *H. Bos.* Culham, etc.
7. *Thames*. Nettlebed, large form; Henley, small form, *A. Fr.* Goring, Chinnor.

Berks. Frilford, Wootton.

***F. apiculata*, G. E. Sm.** *F. lutescens*, Jord.

Syme, E. B. v. 68. 337. Nym. 384.

Native. Glareal. Dry sandy ground. Very rare. A. July, Aug.

First record, *Alf. French*, 1870.

3. *Swere*. Tadmarton, *E. Walford*.

7. *Thames*. Chalk-pit near Flowing Spring, Chalk-pit Lewknor, Nettlebed Wood, *A. Fr.* 'The Caversham plant may be *apiculata*,' *Newb.* Nuffield to Mongewell.

Berks. Wargrave; no record for other border counties.

***F. minima*, Fr.** *Least Cudweed*.

Top. Bot. 253. Syme, E. B. v. 70. 739. Nym. 385.

Native. Ericetal. Sandy heathy ground. Very local. A. June-Sept.

First record, *Sib.* 1794. *F. montana*, L.

1. *Stour*. Tadmarton Heath! *T. Bees*. Broughton, *E. Walford*. Crouch Farm, *Reuben French*.

6. *Thame*. Shotover Hill, near the road to Cuddesdon, *Sib.*

7. *Thames*. Kidmore End, Caversham, *F. Tufnail*.

Berks. Boar's Hill! Tubney, *Bz.*! Frilford.

ASTER. L.

* ***A. paniculatus*, Lam.** *Michaelmas Daisy*.

Alien. A North American plant now well established by the side of the Canal at the back of Worcester College Gardens; near the Railway Station and elsewhere about Oxford: Prof. Asa Gray refers to the above species. See *Journ. Bot.* 1882, p. 83.

* ***A. Novi-Belgii*, L.** *Michaelmas Daisy*.

Alien. Formerly established in several places on the bank of the Cherwell, distant from houses, in Ch. Ch. Meadow, where it had probably come from Botanic Gardens. On the river bank near 'Louse Lock,' and in hedges near Warneford Asylum, etc., *H. Bos. in Phyt.* iv. n. s. 101. An Aster from the Canalside above Hythe Bridge has been referred by Prof. Asa Gray to the Linnean *Novi Belgii* which the Professor says he believes 'includes a great deal.'

[* *A. laevis*, L. An Aster from Park Place Wood, Berks, near Henley, in *Hb. Rudge* in the Brit. Mus. Herb. labelled *A. punicens*, L., is named *A. laevis*, L., by Prof. Asa Gray.]

SOLIDAGO. L.

S. Virgaurea, L. *Golden Rod.*

Top. Bot. 255. Syme, E. B. v. 113. 778. Nym. 387. Bx. 238.

Native. Sylvatical. Woods and heaths. Local and rare. P. July-Sept.

First record, *Sir Jos. Banks*, 1760, 'near Oxford.' This may be from Berks. Sibthorp gives it unlocalised.

7. Thames. Caversham! *Newb.* Wood between Woodcote and Goring.

Berks. Foxcombe Hill, *Rev. E. Foz.* Northants, Boro Hill.

This is given in Walker as one of our common plants.

ERIGERON. L.

E. acre, L. *Blue Fleabane.*

Top. Bot. 254. Syme, E. B. v. 108. 774. Nym. 388. Bx. 166.

Native. Glareal. Dry, gravelly and chalky pastures, railbanks, etc. Rather local. P. July-Oct.

First record, *Conyza acris flore albo*, *Merrett*, 1666.

4. Ray. Cornfields between Begbroke and Woodstock, 1831; naturalized on walls of Botanic Garden; ground above Headington Wick Copse, 1860, *Bx.* Barton, *H. Ridley.* Headington, *Rev. F. Smith.* Islip.

5. Isis. Stanton Harcourt, *Sib.* Eynsham.

6. Thame. Bullingdon Green, Shotover, *Sib.* Headington Hill, *Merrett.* Roadside between Asylum and Shotover, *Bx.* Horsepath, Littlemore railside, abundant, Stanton St. John.

7. Thames. Goring, *H. Bos.* Caversham, plentiful, Mongewell.

Berks. Moultsford.

Was *Merrett's* plant the *E. serotinus* of Reich.?

BELLIS. L.

B. perennis, L. *The Daisy.*

Top. Bot. 259. Syme, E. B. v. 104. 772. Nym. 390. Bx. 44.

Native. Pascual. Fields and meadows, etc. Abundant and generally distributed. P. Jan.-Dec.

First record, *D. Dillenius*, 1726, 'in itinere Botanici.'

INULA. L.

I. Helenium, L. *Elecampane.*

Syme, E. B. v. 97. 766. Nym. 391. Bx. 265.

Denizen. Meadows and pastures. Very rare. P. July, Aug.

First record, *Wm. Coles* in *Adam in Eden*, 1657.

3. **Swere.** 'Parson's meadow, by Adderbury, as I have been told, and in divers other parts of Oxfordshire,' *Wm. Coles*.

5. **Isis.** Stanton St. John, *Sib.* Wychwood, 1880, *H. Bos*.

6. **Thame.** Shotover, *Rev. E. Fox*. Meadow near the Plough public house, Horton, *R. Walker*.

Berks. Near a foot-path leading from the new to the old road to Eynsham; about three miles from Oxford, *Walk. Fl.*

Northants, Warwick.

I. Conyza, DC. *Ploughman's Spikenard.*

Top. Bot. 257. Syme, E. B. v. 98. 767. Nym. 393. Bx. 290.

Native. Roadsides on calcareous soil. Local, but not rare. P.

First record, *Sib.* 1794. *Conyza squarrosa*, L.

1. **Stour.** Sibford Heath.

2. **Ouse.** Fritwell, *A. Fr.*

3. **Swere.** Swalediffe Common, 1863, *T. Bees*.

4. **Ray.** Marston Lane, Elsfield, Headington Wick Copse! Tackley! On the Banbury Road, between sixth and seventh milestone from Oxford, *Bz.* Between Elsfield and Stow Wood, *J. Fr.* Kirtlington. Beckley, between Bicester and Caversfield, etc.

5. **Isis.** Near Witney, on road to Burford! *Sib.* Very abundant in old stone-pits between North Leigh and Ashford Mills! and between the Evenlode and Stonesfield! *Bz.* Charlbury, Minster Lovell, Burford, Wychwood, Woodstock, etc.

6. **Thame.** Wheatley Stone Quarries! *Sib.* Holton Stone Pits! *Bz.* Near Horton, *R. Walk.* Shotover, Stanton Quarries.

7. **Thames.** Watlington, *H. Bos.* Caversham, *F. A. Lees.* Mongewell, Nettlebed, Christmas Common, Lewknor, etc.

Berks. Bessilsleigh, Moulsoford, etc.

Baxter found a new species of *Uredo* on *Inula* in the Oxford Garden, afterwards named *U. pallida* by Dr. Greville.

PULICARIA. G.

P. dysenterica, G. *Fleabane.*

Top. Bot. 258. Syme, E. B. v. 102. 776. Nym. 394. Bx. 170.

Native. Paludal. Wet ditches and marshy places. Locally, but widely distributed. P. July-Sept.

First record, *Sib.* 1794. *Inula dysenterica*, L.

2. **Ouse.** Hardwick, *T. Brayne*.

3. **Swere.** Hardwick Road, *A. Fr.*

4. **Ouse.** Summertown, *Rev. R. Linton*. Beckley, Otmoor, Lower Heyford, Water Eaton, etc.

5. **Isis.** Freeland, Eynsham, South Leigh, etc.

6. **Thame.** Thame, *Hb. Bz.* Albury, Cowley, Horsepath, etc.

7. **Thames.** Saunders' Green, Maple Durham, etc.

P. vulgaris, G. *Small Fleabane.*

Top. Bot. 259. Syme, E. B. v. 102. 771. Nym. 394.

Native. Inundatal. Wet places which have been overflowed in winter.

Very rare. A. Aug., Sept.

First record, *Sib.* 1794. *Inula pulicaria, L.*

4. **Ray.** Noke, *Sib.* Horton Road, leading on to Otmoor, *R. Walk.*, 1834.

Berks (P). Warwick (?), extinct.

EUPATORIUM. L.

E. cannabinum, L. *Hemp Agrimony.*

Top. Bot. 250. Syme, E. B. v. 121. 785. Nym. 396. Bx. 178.

Native. Paludal. Marshes, ditches, damp woods, etc. Rather common, and widely distributed. P. July–Sept.

First record, *Sib.* 1794.

2. **Ouse.** Mixbury.

3. **Swere.** Wroxton, Adderbury, Wickham, *Gull.* Bodicote, near Grove Mill, Alkerton, *A. Fr.*

4. **Ray.** Headington Wick! Noke wood! *H. Bos.* Beckley, Oddington, Elsfeld, Wood Eaton, Marston, etc.

5. **Isis.** Charlbury, *Reuben French.* Blenheim, Wychwood, *H. Bos.* Handborough, Wolvercote.

6. **Thame.** Bullingdon Bog! *Bz.* Horton, Littlemore, Wheatley, Horsepath, Holton, Dorchester, etc.

7. **Thames.** Caversham.

Berks. South Hinksey, Wytham, Bagley, Botley, Cumnor, etc.

PETASITES. T.

P. officinalis, Mch. *Butter-Bur.*

P. vulgaris, D. Top. Bot. 254. Syme, E. B. v. 119. 783. Nym. 397. Bx. 139.

Native. Paludal. River- and brooksides, marshy ground. Not common, but widely distributed. P. March–May.

First record, 1732, Dillenius in *Hortus Elthamensis*, p. 310. *Tussilago hybrida, prope Banbury primum inventa dicitur in Anglia*, see note in *Bot. Guide*, which corrects the mistake in *Withering*, ed. ii. p. 906, and *Smith's Fl. Brit.* of referring the discovery of it to Mr. Woodward, who merely directed *Withering's* attention to the plate in *Hort. Elth.*

3. **Swere.** Banbury, as above, Hanwell, *A. Fr.* Deddington, Somerton, by Canalside, Hooknorton.

4. **Ray.** Banks of the Cherwell, *Sib.* Abundant by Canal from Upper Heyford to Kirtlington, Headington, Barton.
 5. **Isis.** Canal, Wolvercote, *Bx.* Windrush, near Witney, *H. Bos.* Yarnton.
 6. **Thame.** Sandford Lane, *Sib.* *Tussilago Petasites*. Between Nuneham and Abingdon, *Bx.* Thame, *Hb. Bx.* Clifton Hampden, *Rev. F. Bennett.* *Uredo Petasites*, *Grev.*, covers the under surface of the leaf in Autumn, *Bx.* Dorchester.
 7. **Thames.** Streatley Weir, *F. Tufnail.*
- Berks.** Radley, Marcham.
- The *T. hybrida* was the female plant.

TUSSILAGO. L.

T. Farfara, L. *Coltsfoot.*

- Top. Bot. 254. Syme, E. B. v. 115. 780. Nym. 397. *Bx.* 91.
 Native. Agrestal. Fields and waste places, especially on the clay.
 Abundant and generally distributed. P. March, April.
 First record, *Sib.* 1794.

Uredo Tussilaginis, *Grev.* and *Æcidium Tussilaginis*, *Grev.* The latter in a very perfect state grew on this species between Shotover Hill and Headington Quarry, *Bx.*

The Coltsfoot is one of the first plants to spring up on newly-made ground, railway sides, etc.

CARLINA. L.

C. vulgaris, L. *Carlina Thistle.*

- Top. Bot. 246. Syme, E. B. v. 21. 698. Nym. 401. *Bx.* 405.
 Native. Glareal. Dry pastures, heaths, and downs. Local. B.
 June-Aug.

First record, *Sib.* 1794.

1. **Stour.** Tadmarton Heath, Sibford Heath.
2. **Ouse.** Tusmore and Hardwick Heath.
3. **Swere.** Spinney near Broughton Fulling Mill, Swalecliffe Heath, between Broughton and Tadmarton, *A. Fr.*
4. **Ray.** Upper Heyford, Headington Wick, *Bx.* Stow Wood, *H. Bos.* Elsfield.
5. **Isis.** Leafield, *A. Fr.* Burford, *Sib.* North Leigh, Ditchley, Wychwood, Lyneham, Ashford Mills.
6. **Thame.** Shotover, *Bx.* Bullingdon, *Sib.* Wheatley Quarries, Holton, Tetsworth, Great Haseley.
7. **Thames.** Beacon Hill, Stokenchurch, Goring, Chinnor, Ipsden Heath, Nuffield, abundant on the road from Chinnor to Ewelme, Caversham.

Berks. Frilford.

As in *Cirsium anglicum*, the first year's plant has the leaves entire.

ARCTIUM. L.

A. majus, Schk. *Great Burdock.*

Top. Bot. 238. Syme, E. B. v. 23. 699. Nym. 402.

Native. Hedges, copses, waste ground, roadsides, etc. Not uncommon.

B. Aug.

First localised record, *W. Baxter MSS.*, 1827, *A. Bardana*.

1. Stour. Tadmarton.

4. Ray. Otmoor, *Rep. of Rec. Club*, 1881. Lower Heyford.

5. Isis. Burford, Godstow, Oxford.

6. Thame. Lane leading from Cheney Lane to Bullingdon Green, nearly opposite the Windmill, *Bx.* Thame, *Hb. Bx.* Albury.

7. Thames. Caversham with at least two other species, *Newb.* Maple Durham, *F. A. Lees*.

Berks. Bagley. Bucks, Northants, Gloster, Warwick.

A. intermedium, Lange.

Comp. Cyb. 530. Syme, E. B. v. 25. 701. Nym. 402.

Native. Waysides, etc. Rather rare. B. Aug.-Sept.

6. Thame. Waterperry, *A. Fr.* Headington.

Warwick.

A. minus, Schkr. *Burdock.*

Syme, E. B. v. 24. 702. Nym. 402. Bx. 330.

Native. Waysides, woods, hedges, etc. Common and generally distributed. B. Aug., Sept.

First certain record, *T. Beesley*, 1842. See also *Rep. of Rec. Club*, 1881.

[*A. nemorosum, Lej.*

Warwick.]

[*A. tomentosum, Pers.* Comp. Cyb. Br. 530 (error). Oxford.

Ambiguity. Oxford Botanic Gardens, 1867, to which Mr. Baxter says he brought it from Bagley Wood many years before.]

* * *Helianthus tuberosus. The Jerusalem Artichoke.*

Alien. This plant is well established in an old hedgerow between Marston Ferry and Water Eaton. The hedgerow is a double one on a steep bank, and the plant occurs in it for a space of thirty yards.

It also occurs on the site of a turnpike near Tetsworth.

OXOPORDON. L.

O. Acanthium, L. *Cotton Thistle.*

Top. Bot. 245. Syme, E. B. v. 2. 680. Nym. 402. Bx. 273.

Denizen. Hedgebanks, roadsides, waste ground. Rare. B. July-Sept.

First record, *Sib.* 1794.

2. Ouse. Mixbury.

3. Swere. Bretch, *Bees*. Castle Close Banbury, *A. Fr.* On a wall in the 'Reindeer,' *A. Fr.*, quite a casual.

4. Ray. Between Parks and Summertown, 1831, *Bz.* Stow Wood.

6. Thame. Hedgebank on Bullingdon Green near Magd. Coll. Copse, 1831, Cheney Lane, *Bz.* Bullingdon, *H. E. Garnsey*. Thame, *Hb. Bz.*, 1844. Shotover Hill, leaves more green than type, 1884, Bullingdon Quarries.

Berks. Hurley, Inkpen, Ilsley, *Brit.* Frilford. Bucks, casual. Northants. Warwick, alien or denizen.

SILYBUM. G.

* **S. Marianum, G.** *Milk Thistle.*

Comp. Cyb. 531. Syme, E. B. v. 4. 681. Nym. 404.

Denizen or casual. Roadsides and waste ground. Rare, sporadic. B. May-July.

First record, *Sib.* 1794. Unlocalised. *Carduus marianus*, L.

3. Swere. Waste ground a mile beyond Adderbury towards Deddington, at the entrance of the lane to Adderbury West, *T. Bees*.

5. Isis. Waste ground near Osney, 1880.

6. Thame. Bullingdon Bog, *H. E. Garnsey*.

Berks. Plentiful by roadside about a mile from Abingdon, 1827, *Bz.*

CIRSIIUM. Scop.

C. eriophorum, Scop. *Woolly-headed Thistle.*

Top. Bot. 243. Syme, E. B. v. 11. 687. Nym. 405. *Cnicus*, L. *Carduus eriophorus*, L.

Native. Dry pastures, roadsides, open woods. Locally common. B. July-Sept.

First record, *Carduus tomentosus*, *Corona fratrum dictus*, Park. *Blackstone*, 1737.

1. Stour. Sibford Heath.

3. Swere. Hardwick Hill, Bretch, *Gull*. Not common, *T. Bees*.

4. Ray. Stow Wood! *Sib.* Between Stonehouse Farm and [Weston] Peat Pits, *W. Wilson Saunders*. Upper Heyford, in great abundance between Tackley and Gibraltar, *Bz.* Blackthorn, Kirtlington, Tackley, Elsfield, Middleton Stoney.

5. Isis. Between Oxford and Woodstock, South Leigh, *Sib.* About Charlbury, plentifully, *Blackstone*. In Walcot Wilderness and about Langley Manor, *Blackstone MSS.* Do. in *Gough*, etc. *Stonesfield*, *Hb. Br. Mus. Coll. H. Bos.* 1866. Near Ashford Mills!

Bz. Between Witney and North Leigh, *W. Christy*, 1832.
Handborough, Burford, Ditchley, Lyneham, Chadlington, etc.

6. *Thame.* Bullingdon! *H. Bos.* Open Magdalen.

7. *Thames.* Stokenchurch, Lewknor, *H. Bos.*

Berks. Cumnor, Besselsleigh. *Bucks* (f), Northants, Gloster, Warwick.

C. lanceolatum, *L.* *Spear Thistle.*

Top. Bot. 242. *Syme*, E. B. v. 10. 686. *Nym.* 406. *Bx.* 410.

Cnicus, *H.*

Native. Viatical. Hedges, pastures, roadsides, waste places, woods, etc. Very common and generally distributed. *B.* June–Nov. .

First record, *Sib.* 1794. *Carduus lanceolatus*, *L.*

After *arvensis* our most common thistle.

A hybrid with *crispus* occurred near Hethe.

Berks. Near Great Oakley House a hybrid with *crispus* was found in 1881.

C. acaule, *All.* *Dwarf Thistle.*

Top. Bot. 244. *Syme*, E. B. v. 17. 692. *Nym.* 407. *Carduus acaulis*, *L.*

Native. Pascual. Dry pastures, chalk downs. Locally common. *P.* June–Sept.

First record, *C. acaulis*, *minore purpureo flore*, *R.*, *Blackstone*, 1737.

2. *Onse.* Hardwick Heath, Cottisford, Shelswell.

3. *Swere.* Bretch, beyond Neithrop, *Gull.* Broughton, *J. French.* Swalecliffe, Milton, *A. Fr.*

4. *Bay.* Leys near Upper Heyford, between Tackley and Northbrook, on a steep hill near Cherwell, *Bz.* Kirtlington, Stow Wood.

5. *Isis.* Burford Downs! *Sib.* Wychwood! *Blackstone.* Woodstock Park! Stonesfield! Ashford Mills! *Bz.* Bladon Heath, North Leigh, Ramsden Heath, Eynsham, Port Meadow.

6. *Thame.* Bullingdon Green, *Sib.* Cowley Marsh, Christ Church Meadow, *Bz. in Purton.* Stanton Quarries, Holton, Tetsworth, Dorchester, etc.

7. *Thames.* Maple Durham, *Hb. Br. Mus. Col. J. Carroll.* Nettlebed, Chinnor, etc., abundant on the chalk.

A caulescent form is not unfrequent.

C. anglicum, *DC.* *Meadow Thistle.*

Carduus pratensis, *Huds.* *Top. Bot.* 243. *Syme*, E. B. v. 14. 690.

Nym. 407.

Native. Uliginal. Marshes, moist meadows, and bogs. Rare. *P.* July, Aug.

First record, *Sib.* 1794. Wet meadows, *C. pratensis.*

FLORA OF OXFORDSHIRE.

Readington Wick! *Hb. Rev. R. Linton.* M.
all, *H. Bos.*

uth Leigh, Coombe, *Sib.* Yarnton Meadows, 11

Cowley Common, *Sib.* Bullingdon Bog! *H.*
gley Wood, boggy place sloping north; in
Pound, 1831, *Bx.* Frilford and Tubney, 10
ughton, Wytham.

rtnants, rare. Gloster E., near Kelmsford.

ar's plant has the leaves subentire, the perenn
natifed lobed, and this form has been occasional

. *Forsteri*, Sm. I am inclined to think the plant
longes here rather than to the hybrid. The

steri is rendered vague by the word 'forma

used to refer to the decurrent leaves of per

l plant sent to me as *C. heterophyllus*.

, *Scop.* *Marsh Thistle.*

13. Syme, E. B. v. 12. 688. Nym. 409.

ratul. Meadows, woods, hedgebanks, etc.

ributed. P. July-Sept.

, *Sib.* 1794. *Carduus pulustris*, L. With wh

between the two Windmills, *Bx.* MSS.

d, Horsepath, etc. The form with dense

ie common plant, but specimens with anthodes

iced. A plant with subsolitary anthodes on

stem less decurrently winged occurred at H

some *arvensis* parentage.

, *Scop.* *Common Thistle.*

13. Syme, E. B. v. 17. 693. Nym. 410.

grestal. Cornfields, roadsides, etc. Abundant

July, Aug.

nearly covered with *Uredo suaveolens*.

, *Sib.* 1794. *Carduus arvensis*, L.

CARDUUS. L.

L. *Musk Thistle.*

11. Syme, E. B. v. 7. 683. Nym. 411.

Vaysides, waste ground, chalk downs, etc.

t.

, *Sib.* 1794.

Tadmarton Heath.

Mixbury, Hardwick, etc.

Bloxham Road, Gull. Bretch! Milton,

. *Fr.*

Bx. r.
No.

n, Wykh.

tion. Hardheads.

v. 33. 708. Nym. 424.

lds and hedgesides, etc. Not uncommon
July-Sept.

ed, Stourwell.

Whury, A. Fr. Barford, Milton.

ld, Headington, etc.

ury.

Bos. ! Headington Quarries, Horsepath,
er, alba, etc.

ley, A. Fr. South Stoke, Goring, Grime's

mer, Radley, etc.

ills. Cornflower.

v. 34. 709. Nym. 424. Bx. 35.

lds, on light sandy soil. Rather rare and

medio cœruleo. Mr. Witham in *Merrett*,

ton, allotments Tadmarton Heath, A. Fr.

H. Bos. Stow Wood, Elsfield, Noke.

Winey, W. *Whitwell*. Freeland.

Hale, var. *alb.*, Mr. Witham in *Merrett*.

ld in some old stone-pits between Cowley

llington, H. Bos. Shotover, Cuddesdon,

Noke.

Harnaby's Thistle.

B. v. 38. 712. Nym. 430.

A. July-Sept.

growing lucerne at Milton, 1868, A. Fr.

Lawson.

very rare.]

CHUS. L.

istle.

5. 813. Nym. 433.

cultivated ground, and waste places.

P. July-Oct.

4. Ray. Headington Wick! *Hb. Rev. R. Linton*. Meadows by the Cherwell, *H. Bos.*

5. Isis. South Leigh, Coombe, *Sib.* Yarnton Meadows, *H. Bos.* North Leigh.

6. Thame. Cowley Common, *Sib.* Bullingdon Bog! *H. Bos.*

Berks. Bagley Wood, boggy place sloping north; in meadow near Botley Pound, 1831, *Bx.* Frilford and Tubney, meadow below Kennington, Wytham.

Bucks. Northants, rare. Gloster E., near Kelmsford. Warwick.

The first year's plant has the leaves subentire, the perennial frequently has leaves pinnatifid lobed, and this form has been occasionally recorded as the hybrid *C. Forsteri*, Sm. I am inclined to think the plant in Flora of Hampshire belongs here rather than to the hybrid. The description in E. B. of *Forsteri* is rendered vague by the word 'former' instead of 'latter,' being used to refer to the decurrent leaves of *palustris*. I have had the annual plant sent to me as *C. heterophyllus*.

C. palustre, Scop. *Marsh Thistle.*

Top. Bot. 243. Syme, E. B. v. 12. 688. Nym. 409.

Native. Pratal. Meadows, woods, hedgebanks, etc. Common and generally distributed. P. July–Sept.

First record, *Sib.* 1794. *Carduus palustris*, L. With white flowers on Shotover Hill between the two Windmills, *Bx.* MSS. Also at North Leigh, Binfield, Horsepath, etc. The form with densely aggregated anthodes is the common plant, but specimens with anthodes subsolitary have been noticed. A plant with subsolitary anthodes on longer pedicels and with the stem less decurrently winged occurred at Headington, and probably had some *arvensis* parentage.

C. arvensis, Scop. *Common Thistle.*

Top. Bot. 243. Syme, E. B. v. 17. 693. Nym. 410.

Native. Agrestal. Cornfields, roadsides, etc. Abundant and ubiquitous. P. July, Aug.

Sometimes nearly covered with *Uredo suaveolens*.

First record, *Sib.* 1794. *Carduus arvensis*, L.

CARDUUS. L.

C. nutans, L. *Musk Thistle.*

Top. Bot. 241. Syme, E. B. v. 7. 683. Nym. 411. Bx. 177.

Native. Waysides, waste ground, chalk downs, etc. Not uncommon. B. May–Sept.

First record, *Sib.* 1794.

1. Stour. Tadmerton Heath.

2. Ouse. Mixbury, Hardwick, etc.

3. Swere. Bloxham Road, Gull. Bretch! Milton, Wykham, Crouch Lane, A. Fr.

4. Ray. Beckley, Elsfield.
5. Isis. *Var. alb.* between Ashford Mills and Stonesfield, near the Evenlode, *Bz.* Wychwood, Woodstock, *H. Bos.* North Leigh, Charlbury, Wolvercote.
6. Thame. Thame, *Hb. Bz.* Magdalen Wood, Horsepath, Bullingdon, Wheatley, Dorchester.
7. Thames. Henley, *A. Fr.* Caversham, *Phyt.* ii. 340. *n. s.* Lewknor, Cane End, Chinnor, Ilvingden Farm, white flowers, pale pink flowers at South Stoke.

Berks. Cumnor, Frilford, Wytham, etc.

Var. C. nutanti-crispus. A hybrid between *nutans* and *crispus*.

2. Ouse. Hardwick Heath.
4. Ray. Near Stow Wood.
5. Isis. Grafton Common.
7. Thames. Near Ipsden, plentiful.

Berks. Frilford, Cumnor, Bessilsleigh.

C. crispus, L. *Thistle upon Thistle. Watted Thistle.*

Top. Bot. 242. Syme, E. B. v. 7. 684. Nym. 413.

Native. Viatical. Hedges, waysides, etc. Common and generally distributed. B. June-Oct.

First record, *Dr. Lightfoot MSS.* 1760. *C. polyacanthos*, Curt.

Var. C. polyanthemus, Koch. Anthodes aggregated, pericline, ovoid; leaves green on both surfaces, veins pubescent.

5. Isis. Grafton Common, Osney.
- Var. C. acanthoides*, L. *Species*, Nyman, p. 412.
3. Swere. Canalside, Banbury, *T. Bees*.
4. Ray. Near Bicester, *litigiosus*. G.-et.-G.
5. Isis. Near Bampton.
6. Thame. Near Wheatley.

By this plant I intend the one with subsolitary heads, with prickly, not naked, peduncles, and leaves with broad segments green on both sides, veins pubescent.

C. tenuiflorus, Curt.

Top. Bot. 242. Syme, E. B. v. 6. 682. Nym. 415. Curt. F. L. 6.

Native. Viatical. Waysides, waste places. Very rare. A. or B. July, Aug.

First record, *Sib.* 1794.

4. Ray. Waste ground near the Parks, *Rev. E. Fox*.
5. Isis. Yarnton near the Church, *Bz. in Walk*.
6. Thame. Bensington, Dorchester, *Sib*.

Berks. Near Dry Sandford! Northants, extinct (!). Gloster. Warwick, absent.

SERRATULA. L.**S. tinctoria, L.** *Saw-wort.*

Top. Bot. 240. Syme, E. B. v. 28. 704. Nym. 417. Bx. 174.

Native. Sylvestral. Woods and thickets. Local and rather rare. P. July, Aug.

First record, *Sib.* 1794.3. **Swere.** Beyond North Newington, *A. Bees.* Farmington, towards Epwell, *T. Bees.* (*French and Ward.*)4. **Ray.** Wood near Begbroke, Headington Wick Copse, *Bx.* Copse near Marston Road, *H. Ridley.* Headington Copse, Stow Wood! Blackthorn, *H. Bos.*6. **Thame.** Between Bullingdon Green and Shotover Hill, by foot-path, 1826, *Bx. MSS.* Magdalen Wood.**Berks.** Cumnor Meadows, *Bx.* Wootton, *H. Bos.*! Bucks unrecorded. Northants, Gloster, Warwick.**CENTAUREA. L.****C. nigra, L.** *Knapweed.*

Top. Bot. 247. Syme, E. B. v. 31. 706. Nym. 421.

Native. Pascual. Meadows, heaths, banks, roadsides, etc. Common and generally distributed. P. July-Sept.

First record (for the rayed variety), *Dillenius*, 1724. *Ray. Syn.* ed. iii. p. 199. The rayed variety has also been noticed in the following localities.1. **Stour.** Tadmarton.4. **Ray.** Stow Wood, Headington Wick, Beckley, Marston.5. **Isis.** 'Inter Blaiden et Yarnenton copiose,' *Dill.* South Leigh, *Sib.* North Leigh. The common form in river meadows from Wolvercote to Kelmscott.6. **Thame.** Shotover! *Sib.* Tetsworth, Albury, abundant by Wheatley railside.7. **Thames.** Near the 'Flowing Spring,' *A. Fr.* Ipsden, Mongewell, common on the chalk, Goring, *Rep. of Rec. Club*, 1883.Var. *C. decipiens*, Thail.7. **Thames.** On the bank of road in the Avenue, below Gravel Hill Colts W. of Caversham, plentiful and characteristic, the flowers have a bright rose-pink hue, very different from the purplish red of *nigra* var. *radiata*. The leaves too are narrower (not broader as said in *Bab. Man.*), and often sinuate dentate, as if approaching *C. Scabiosa*, varying much in stature, but usually with one terminal head only, *F. A. Lees* in corr. See also note in *Rep. of Rec. Club*, 1883, p. 42. Crowell, North Stoke.**Berks.** Wargrave, *Brit.*

C. Scabiosa, L. *Matfellow. Hardheads.*

Top. Bot. 247. Syme, E. B. v. 33. 708. Nym. 424.

Native. Agrestal. Cornfields and hedgesides, etc. Not uncommon and widely distributed. P. July-Sept.

First record, *Sib.* 1794.

1. Stour. Tadmarton, Sibford, Stourwell.

2. Ouse. Mixbury.

3. Swere. Banbury, Adderbury, *A. Fr.* Barford, Milton.

4. Ray. Kirtlington, Elsfield, Headington, etc.

5. Isis. Stonesfield, Charlbury.

6. Thame. Bullingdon, *H. Bos.!* Headington Quarries, Horsepath, Wheatley, Dorchester, var. *alba*, etc.

7. Thame. Caversham, Henley, *A. Fr.* South Stoke, Goring, Grime's Dyke, var. *alb.*, etc.

Berks. South Hinksey, Cumnor, Radley, etc.

C. Cyanus, L. *Bluebottle. Cornflower.*

Top. Bot. 247. Syme, E. B. v. 34. 709. Nym. 424. Bx. 35.

Colonist. Agrestal. Cornfields, on light sandy soil. Rather rare and decreasing. A. July-Sept.

First record, *Cyanus flore albo medio cœruleo.* Mr. Witham in Merrett, 1666.

3. Swere. Milton, Hook Norton, allotments Tadmarton Heath, *A. Fr.*

4. Ray. Headington Field! *H. Bos.* Stow Wood, Elsfield, Noke.

5. Isis. Wood Green near Witney, *W. Whitwell.* Freeland.

6. Thame. Hockley-in-the-Hole, var. *alb.*, Mr. Witham in Merrett. Thame, *Hb. Bx.* Plentiful in some old stone-pits between Cowley and Littlemore, *Bx.* Bullingdon, *H. Bos.* Shotover, Cuddesdon, Culham.

7. Thames. Goring, South Stoke.

Berks. Boar's Hill, Frilford.

* **C. solstitialis, L.** *St. Barnaby's Thistle.*

Comp. Cyb. Br. 532. Syme, E. B. v. 38. 712. Nym. 430.

Alien. Cornfields. Very rare. A. July-Sept.

3. Swere. A solitary plant among lucerne at Milton, 1868, *A. Fr.*

7. Thames. Goring, 1873, *Hb. Lawson.*

[*C. Calcitrapa, L.* Northants very rare.]

SONCHUS. L.

S. arvensis, L. *Corn Sowthistle.*

Top. Bot. 227. Syme, E. B. v. 155. 813. Nym. 433.

Native. Agrestal. Cornfields, cultivated ground, and waste places. Common and generally distributed. P. July-Oct.

First record, *Sib.* 1794.

Gulliver recorded *S. palustris*, L. from Banbury Canalside. Respecting this Mr. H. C. Watson says, 'certainly not *palustris*, probably *arvensis*, but one specimen is imperfect.' † is annexed to it in Gull. herb., T. Bees.

The plant was certainly not *palustris*, but the marsh form of *arvensis*.

Var. *glabra*, E. B. West side of Shotover, 1884. This appears only to differ from *arvensis* in having glabrous peduncles. A large marsh form sometimes occurs in damp ground with very showy flowers.

S. asper, All. *Sowthistle.*

Syme, E. B. v. 154. 812. Nym. 434.

Native. Agrestal, etc. Cultivated and waste ground. Very common.

A. May-Sept.

First record, *H. Boswell*, in Phyt. iv. n. s. 100, 1860.

An entire leaved form occurs. The outline of the leaves and auricles of the typical plant is very beautiful. A form with glandular peduncles has been noticed.

S. oleraceus, L. *Sowthistle.*

Top. Bot. 227. Syme, E. B. v. 153. 810. Nym. 434. Bx. 147.

Native. Cultivated ground and waste places. Abundant throughout the county. A. May-Sept.

First record, *Sib.* 1794, with *Uredo Sonchi*, Grev. Bx.

A form with very pale yellow flowers occurs. The leaves of this species vary remarkably in leaf cutting.

LACTUCA. L.

L. virosa, L.

Top. Bot. 225. Syme, E. B. v. 145. 805. Nym. 345. Bx. 315.

Native. Viatical. Waysides, under hedges. Local and rare. A. or B. Aug., Sept.

First record, *Sir Jos. Banks*, 1760.

4. Bay. Marston Lane, *Sib.* Headington Hill, *Banks*. Between Marston and Elsfield! *H. Bos.* Marston Road, between Marston and Wood Eaton, Noke.

6. Thame. Near Menmarsh Farm, *A. Fr.* Not uncommon under hedges, inside of old foot-path leading from back of Roman Catholic Chapel to Asylum, Bz.

Limited to the base of the Coralline Oolite plateau.

Berks. On hedgebank going from Botley to Eynsham, about 200 or 300 yards before you come to the bridge, Bz. 1831. Maidenhead, *Brit.* Northants, near Warkworth, Purston. In all the border counties.

L. muralis, D C.

Top. Bot. 226. Syme, E. B. v. 150. 808. Nym. 435. Bx. 27.

Native. Septal, etc. Stony woods, hedges, walls, etc. Local. A. or B. July-Oct.

First record, *Sib.* 1794. *Prenanthes muralis*, L.

2. Ouse. Near Fritwell, *A. Fr.*

3. Swere. Wykham opposite Mill, *T. Bees.* Roadside Great Tew, *A. Fr.*

4. Ray. Magd. Coll. Long Wall, *R. Walker!* St.-Peter-in-the-East, *Bx.* Stow Wood, *H. Bos.* Elsfield, abundant in Magd. Coll. Walks and about the College.

5. Isis. Top of Stanton Harcourt kitchen, *Sib.* Bridge between Wolvercote and Godstow, walls going from Christ Church Meadow to St. Aldate's, *Bx.* Shipton in Wychwood, Woodstock, Blenheim Park Wall, Stonesfield, Ditchley.

6. Thame. Waterstock, *A. Fr.*

7. Thames. Goring, *Newb.* Stokenchurch, *Sib.* Nettlebed, *A. Fr.* Henley Park Hill, *Bx.* Chinnor, Maple Durham, Kidmore End, Nuffield, Whitchurch, Sunley Wood, Aston Wood, Queen's Wood, etc. Common on the Chilterns.

Berks. Bagley, Unwell Wood.

** *Chondrilla juncea*, L. *Nym.* 436.

Alien. Plants have been naturalized for some years on the wall of the Botanic Gardens.

TARAXACUM. *Juss.*

T. officinale, *Web.* *Dandelion.*

Top. Bot. 236. Syme, E. B. v. 142. 802. *Nym.* 437. *Bx.* 163.

Native. Meadows, waste places, roadsides, and on walls in Oxford.

Abundant and generally distributed. P. March-Oct.

First record, *Plot*, 1677, 'with striped foliage.'

Var. *T. erythrospermum*, *And.* Syme, E. B. v. 142. 803.

3. Swere. Shutford.

4. Ray. Stow Wood, side of road.

5. Isis. Handborough railside.

6. Thame. Shotover.

7. Thames. Lewknor, *A. Fr.*

Var. *T. lævigatum*, *Reich.*, 'olive-green achenes.' *Ic. Germ.* 19. 1405.

4. Ray. Railside Upper Heyford.

7. Thames. Caversham, *Newb.* Chause Heath.

Var. *T. palustre*, *DC.* *Spec. Nyman.* Syme, E. B. v. 143. 804.

4. Ray. Weston Peat Pits, Headington Wick.

5. Isis. Wychwood.

6. Thame. Bullingdon Bog.

hieracium. *L.*

H. boreale, *Fr.*

Top. Bot. 235. Syme, E. B. v. 205. 854. *Nym.* 438.

Native. Septal, etc. Woods, hedgebanks, thickets, etc. Local and rather rare. P. July-Sept.

First record, *Sib.* 1794. *H. sabaudum*, L.

1. Stour. Spinneys near Tadmorton Heath! *T. Ward*, 1863.

3. Swere. Broughton, *R. French*. Worton Wood, Hanwell, *R. French*. Somerton railside.

4. Ray. Stow Wood, *Bz.* Tackley Heath.

5. Isis. Freeland, Bruern Wood.

6. Thame. Shotover, Nuneham, near Wheatley.

7. Thames. Henley Park, Stokenchurch, *Sib.* Crowell Hill, Checkendon.

Berks. Boar's Hill, Bagley, Cumnor Hurst.

***H. umbellatum*, L.**

Top. Bot. 234. Syme, E. B. v. 203. 853. Nym. 439. Bz. 165.

Native. Ericetal, etc. Heaths on sandy or gravelly soil. Local and rather rare. P. Aug., Sept.

First record, *Sib.* 1794.

1. Stour. Tadmorton Heath, *T. Ward*, 1863! 1885.

6. Thame. Shotover, *Bz. in Purton!*

7. Thames. Goring, *H. E. Garnsey*. Wood near Stoke Row.

Berks. Boar's Hill, Wootton.

***H. tridentatum*, Fr.**

Nym. 441. Syme, E. B. v. 201. 852.

Native. Border of woods. Rare or overlooked. P. July.

First certain record, 1883, *the Author*.

3. Swere. Worton Wood, *Reuben French* in *Bees. MSS.*, where it is queried.

7. Thames. Hollandridge Lane. (*H. corymbosum*, French. Nettlebed Common is probably this). Near Park corner.

Berks. Bagshot Heath, *Wats.* Gloster, Warwick, Northants (!)

***H. vulgatum*, Fr.**

Syme, E. B. v. 197. 850. Nym. 443.

Native. Sylvestral, etc. Woods on sandy soil, walls, etc. Rather rare. P. June-Sept.

First record, *Sib.*, *H. murorum*, L. is almost certainly this species.

4. Ray. Stow Wood! Wadham walls! *Sib.* Magd. Coll. Walks, *Bz. in Walk.!* New College Lane, *Bz.* Headington Wick, *H. Bos.* Rail between Tackley and Kirtlington.

5. Isis. Eynsham Hall Plantation, *T. Thurland*. Godstow, *H. Bos.* St. John's College Walls, etc., *Bz.* Bruern Wood.

6. Thame. Shotover, *H. Bos. Murorum* teste J. G. Baker is this species. Merton College Walls, etc.

7. Thames. Withy Coppice, Hollandridge Lane, Chinnor.

Berks. Boar's Hill, Bagley. Bucks, Northants, Gloster, Warwick.

Var. nemorosum.

Magd. Coll. Water Walks.

? *H. murorum*, *Fr.*

Syme, E. B. v. 191. 846. Nym. 444.

Native (?) Walls.

Sibthorp's records belong to *vulgatum*; see *Walk. Flora*, p. 225, and *Sir J. Smith, E. Flora*. Baxter states he could not find a single specimen of *murorum* on Wadham walls, although there was plenty of *vulgatum*. He says there are no specimens of Sibthorp's preserved in the Sherardian Herbarium; but when Sibthorp arranged that collection according to the Linnean System, he appears to have considered *murorum*, *maculatum* and Smith's *sylvaticum* as mere varieties of the same species.

The specimen of *murorum* of Baxter from Magd. Coll. Walks, June 15, 1831, on faith of which *murorum* is included as an Oxford plant in Walker's *Flora*, is only a form of *vulgatum*. The Rev. H. E. Fox informs me that a specimen he gathered on the walls of Blenheim Park corresponds closely with a plant named *murorum* by H. C. Watson.

The record of this species for Oxford must be queried. [Gloster E.]

* *H. maculatum*, *Sm.* *Spotted Hawkweed.*

Syme, E. B. v. 195. 849.

Alien. Waste places. P. July. On rubbish. Christ Church Meadow, probably an escape from the Botanic Garden, where the plant is naturalized.

** *H. amplexicaule*, *L.*

Syme, E. B. v. 178. 835. Nym. 448.

Alien. Old walls. Naturalized. P. June, July.

Walls of Magd. College, *Rev. W. Bree in Purton*, 1824. Naturalized on walls of Oxford Botanic Garden. Mr. Bicheno says that it has an equally good right to a place in the British *Flora* as *Senecio squalidus* and some other plants, *Walk. Flora*, app. 308. Seems firmly established on banks of Cherwell near Botanic Gardens and on Magd. Coll. Walls, *H. Bos. in Phyt.* 1860, 101, see also *Report of Lond. Bot. Ex. Club*, 1867.

Comp. Cyb. Br. 527. Oxford on walls there. Alien.

Sibthorp's *H. cerinthoides* was probably this plant, see *Sib. pref.* p. viii.

** *H. aurantiacum*, *L.*

Syme, E. B. v. 166. 823. Comp. Cyb. 525. Nym. 453.

Alien. A solitary tuft in the Park, Great Tew, *A. Fr.* Escape at Upper Heyford, *Rev. E. Fox*.

H. Filosella, *L.* *Mouse-ear Hawkweed.*

Top. Bot. 229. Syme, E. B. v. 165. 822. Nym. 454.

Native. Dry banks, pastures, and heaths. Rather common. P. May-Aug.

First record, *Sib.* 1794.

1. **Stour.** Tadmarton.

2. **Ouse.** Mixbury.

3. **Swere.** Drayton Lane, Wroxton near the Tuscan Temple, *Gull.* Bretch, *Bees.* Somerton railside.

4. **Ray.** Between Middleton Stoney and Bicester, *A. Fr.* Headington Wick, *H. Bos.* Islip, Stow Wood, Upper Heyford.

5. **Isis.** Cornbury Park, Charlbury, Ditchley, Blenheim Park, North Leigh, Worcester College Gardens.

6. **Thame.** Thame, *Hb. Bz.* Bullingdon, *H. Bos.* Shotover, Wheatley Quarries, Holton Quarries, Haseley, Culham.

7. **Thames.** Nettlebed, Crookly Green, *A. Fr.* Goring, Whitchurch, Grime's Dyke, Beacon Hill, Binfield, Ipsden. Common on the Chilterns.

Berks. Cumnor, Frilford.

CREPIS. L.

C. virens, L.

Top. Bot. 227. Syme, E. B. v. 161. 818. Nym. 457. Bx. 366.

Native. Agrestal, etc. Roadsides, fields, dry banks, etc. Very common and generally distributed. B. June-Sept.

First record, *Sib.* 1794. *C. tectorum, L.*

Mr. Newbould says the Oxford and Goring plant is large and with only one stem.

The stout plant with erect habit, and phyllaries and peduncles covered with dark glandular hairs, is not unfrequent, and is probably *C. agrestis*, W.K. A smaller more branched plant with pubescent phyllaries is likely *C. diffusa*, DC. The two varieties are connected by a chain of intermediates, the plant being very variable.

C. foetida, L.

Syme, E. B. v. 157. 815. Nym. 458.

Native (?). At Stonesfield Quarries in Oxon, eight miles from Oxford. *MS. note* by Dr. Lightfoot in *Hudson's Flora Anglica*, about 1760. No other record.

Berks. Near Maidenhead Station, near Reading, Bisham Wood, *Brit.* Bucks (?).

C. taraxacifolia, Thuil.* *Barkhausia, DC.

Syme, E. B. v. 159. 816. Nym. 459.

Native. Viatical. Fields, waysides, railway-banks, etc. Rather rare. A. or B. June-Aug.

First record, *the Author*, 1884.

5. **Isis.** Charlbury, on railway-banks for some distance, near Ramsden

Heath, Ditchley, Wolvercote. Very large specimen in field near Charlbury.

7. *Thames*. Clover field near Chinnor.

Berks. Maidenhead, *Rep. of Rec. Club*, 1881. *Northants! Rep. of Rec. Club*, 1879.

* *C. setosa*, *Hall. fil.* Syme, E. B. v. 159. 817. Nym. 459.

Alien or casual. Cultivated fields. A. July.

Single specimen in clover-field near Charlbury, 1884.

[*C. biennis*, *L.* Plentiful about Wakerley, *Northants*. *Warwick*.]

[*C. paludosa*, *L.* *Warwick*.]

TRAGOPOGON. *L.*

T. pratense, *L.* *Goat's-beard*.

Top. Bot. 220. Syme, E. B. v. 138. 798. Nym. 463. Bx. 390

Native. Pratal. Meadows, railway-banks, waysides. Not very common, but widely distributed. B. May-July.

First record, *Sib.* 1794.

1. *Stour*. Near Stourwell.

2. *Ouse*. Mixbury.

3. *Swere*. Frequent, Farmfield, *Gull*. Oxford Road, not common now, *T. Bees*. About Banbury, *A. Fr.* Barford.

4. *Ray*. Noke, Islip, Lower Heyford, Headington Wick, Marston, near Woodstock Road Station, type.

5. *Isis*. Finstock, Handborough, Bampton.

6. *Thame*. Between St. Clement's and Iffley, and not uncommon about Oxford, and sometimes with *Acidium Tragopogonis*. The Oxford plant has the involucre much longer than the *Ray*, *Bz.* Iffley, *Newb.* Nuneham, *H. Bos.* Wheatley, Albury, Shotover.

7. *Thames*. Gathampton, *H. Bos.* Watlington, Chinnor, Goring, Ipsden, North Stoke.

Berks. Marcham, Moulsoford, Boar's Hill, *genuina*, near Wellington College. The var. *minus*, Miller, is the common form in Oxfordshire.

PICRIS. *L.*

P. echioides, *L.* *Ox-tongue*.

Helminthia echioides, *G.* Top. Bot. 221. Syme, E. B. v. 137. 797. Nym. 466. Bx. 270.

Native. Viatical. Hedges, woods, etc. Local, found almost exclusively on stiff clayey ground. A. or B. July-Oct.

First record, *Sib.* 1794.

3. *Swere*. Broughton, rare, *T. Bees*.

4. *Ray*. Elsfield, *H. Bos.* Fencott, *Rev. Moyle Rogers*. Marston, Beckley.

5. *Isis*. Pinsley Wood, *Rev. F. Bennett*. Canalside Wolvercote, Handborough.
 6. *Thame*. Oxford border of Hell Copse, *A. Fr.* Thame, *Hb. Bx.* Between Stanton and Brill, near Warneford Asylum, *H. Bos.* Between Littlemore and Toot Baldon, *H. E. Garnsey*. Horton-cum-Studley, Dorchester, abundant, Cowley, Shotover on Kimmeridge Clay.
 7. *Thames*. Saunders' Green on London Clay.
- Berks. Wittenham Wood near Day's Lock, Wootton.

***P. hieracioides*, L.** *Hawkweed Ox-tongue.*

Top. Bot. 222. Syme, E. B. v. 136. 796. Nym. 466. Bx. 274.

Native. Viatical. Hedgesides, banks, etc. Local. A plant of chalky or calcareous soil. P. June-Oct.

First record, *Sib.* 1794.

1. *Stour*. Tadmarton Heath, *T. Bees*. Sibford Heath.
2. *Ouse*. Fritwell! *A. Fr.*
3. *Swere*. Between Banbury and Broughton, rare, *T. Bees*. Between Little Barford and Milton, *A. Fr.* Broughton Mill, *R. French*.
4. *Ray*. Headington Wick, *Sib.* Common about Upper Heyford, in cornfields and by roadsides N. E. and S. E. of village, *Bx.* 1831. Beanton, between Lower Heyford and Kirtlington, Bletchington.
5. *Isis*. Stanton Harcourt, Bladon, *Sib.* Between Witney and Burford in old stone-pits! Near Ashford Mills, and about Stonesfield! Between Church Handborough and Cassington, a little above the Evenlode, *Bx.*
6. *Thame*. Between Headington and Shotover, *R. Walker*. Bul-lington, *H. Bos.* Shotover, Littlemore railway-side.
7. *Thames*. Stokenchurch Hill, *Bx.* Woodcote, Lewknor, Caversham, Ipsden, Goring, etc.

Berks. Boar's Hill.

Var. *P. arvalis*, Jord. Nym. 466. Syme, E. B. v. 136.

6. *Thame*. Littlemore railside, with type, *Rep. of Rec. Club*, 1882.

LEONTODON. L.

***L. hispidus*, L.**

Top. Bot. 224. Syme, E. B. v. 133. 793. Nym. 468. Bx. 318.

Native. Pratal, etc. Meadows and pastures. Common and generally distributed. P. June-Sept.

First record, *Sib.* 1794.

A variety of this with the calyx and the stem, except about two or three inches at base, destitute of hairs, grows in the stone-pits, Headington Quarry. I gathered it for *hirta*, but found that the seeds had all feathery down, that the flowerets were hairy at the surface and tipped with glands, and the flowers quite as large as *hispidus*, *Bx. MSS.*, 1831.

L. autumnalis, L.

Apargia autumnalis, W. Top. Bot. 224. Syme, E. B. v. 134. 794. Nym. 469.

Native. Pascual, etc. Meadows, roadsides, pastures, waste ground. Abundant throughout the county. P. June-Sept. An excessively variable plant.

First record, *Sib.* 1794. *L. autumnale*, L.

L. hirtus, L. *Thrinicia hirta*, R.

Top. Bot. 223. Syme, E. B. v. 131. 792. Nym. 470. Bx. 323.

Native. Pascual. Gravelly and sandy fields, etc. Not rare. P. June-Sept.

First record, *J. Bobart*, 1690. *Hieracium pumilum saxatile aspersum præmorsa radice*, J. B. *Ray Syn.* ed. i.

'Found on banks of new parks, and divers other places about Oxford.'

3. Swere. About Banbury, *T. Brayne*.

4. Ray. Stow Wood, etc.

5. Isis. Oxford, *Hb. Br. Mus. col. W. T. Dyer*.

6. Thame. Shotover, Bullingdon, etc., *H. Bos.* Culham, etc.

7. Thames. Mongewell, Woodcote, etc.

Berks. Frilford.

HYPOCHERIS, L.

H. radicata, L.

Top. Bot. 225. Syme, E. B. v. 129. 790. Nym. 470. Bx. 406.

Native. Pascual. Meadows, waste places, etc. Common and generally distributed. P. June-Sept.

First record, *Sib.* 1794.

A glabrous form was noticed on Epwell Heath.

[*H. maculata*, L. Northants very rare. Barnack Quarries.]

[*H. glabra*, L. Bucks, Northants, very rare. Warwick, probably extinct.]

[*Arnoseris pusilla*, G. Northants rare, Spratton. Bucks, Brickhill.]

CICHORIUM, L.

C. Intybus, L. *Wild Chicory*.

Top. Bot. 237. Syme, E. B. v. 122. 786. Nym. 472. Bx. 417.

Native. Viatical, etc. Waysides and cultivated fields, field-borders, etc. Abundant on the chalk, and common on the Oolite. P. July-Oct.

First record, 'with striped foliage,' *Plot*, 1677.

2. Ouse. Fritwell, *A. Fr.*

3. Swere. Twyford Lane, rare near Banbury, common beyond Adderbury, *T. Bees*. Near Deddington, *Gull*. Hanwell, *R. French*. Bloxham, *E. Walford*.

4. Ray. Common about Upper Heyford, Bz. Between Middleton Stoney and Bicester, A. Fr. On newly turned soil near the Parks, Oxford, both blue and white flowers, W. Whitwell.
6. Thame. Near Cowley Marsh, with *Uredo Cichoracearum*, Bz. Thame, Hb. Bz. Bullingdon, H. Bos. Culham! between Toot Baldon and Littlemore, H. E. Garnsey. Horsepath.
7. Thames. Caversham, A. Fr. South Stoke, Mongewell, Whitchurch, Nettlebed, Goring, with var. *alb*.

This plant may occasionally be found growing in the turnpike roads, associated with *Potentilla anserina*.

LAPSAWA. L.

L. communis, L. Nipplewort.

Top. Bot. 237. Syme, E. B. v. 125. 787. Nym. 474. Bz. 150.

Native. Agrestal, etc. Hedges, waste and cultivated ground. Very common and universally distributed. A. June-Aug.

First record, Sib. 1794.

** *Ambrosia artemisiæfolia, L.*

Casual. In a cornfield near Bodicote, left standing by reapers among stubble, 1865, Hb. Br. Mus., A. French. Recorded as *A. Peruviana*. A North American plant of casual occurrence in Britain.

** *Calendula officinalis, L.* Marigold.

Alien. Riverside near Wolvercote, a garden straggler.

ORD. XLIV. CAMPANULACEÆ, Juss.

CAMPANULA. L.

C. glomerata, L. Clustered Bellflower.

Top. Bot. 265. Syme, E. B. vi. 8. 866. Nym. 478.

Native. Pascual. Chalk downs, dry banks, and calcareous pastures.

Local. P. May-Oct.

First record, Wm. Coles in *Adam in Eden*, p. 117, 1657.

2. Ouse. Near Fritwell, A. Fr. Mixbury, R. C. Pryor.

3. Swere. Near unto the Cane's End, leading from Deddington to Oxford, about the place where the way turneth from Deddington to Dunstew, W. Coles. Andrew's Pits, Gull. Bretch, Constitution Hill, Tadmarton, T. Bees. Broughton, A. Fr. Wroxton, T. Brayne.

4. Ray. Var. *alba* about half a mile north of Upper Heyford, near a bog, 1831; in lane leading from Banbury Road to Rousham; roadside between Tackley and Gibraltar, 1831, Bz.

5. Isis. Ditchley, Blackstone, 1737! Woods Heythorp, Burford Downs! Stonesfield! Sib. Charlbury! Near Ashford Mills, Bz.

6. **Thame.** Littlemore, *Sib.* Bullington, *Bz.* Horsepath, Cuddesdon, Dorchester.
7. **Thames.** Wood margins, Caversham, *W. Pamplin and A. Irvine, Phyt.* v. 156, do. *Hb. Br. Mus. J. Carroll.* Goring, *Hb. Lawson.* Stokenchurch, *Hb. Bz.* Grime's Dyke, Maple Durham, Penley Wood, Ipsden, Ilvingden Farm, monstrosity at Woodcote, with white flowers at Nuffield.

Plot notices the white flowered form as occurring in Oxon.

C. latifolia, L. *Throat-wort. Giant Bellflower.*

Syme, E. B. vi. 8. 868. Nym. 478.

Alien or incog.

3. **Swere.** Whichford Wood, *T. Bees.* Not wild. Sonning, *Hb. Rudge.* Doubts as to being rightly named or if the locality was in Oxon or Berks. Top. Bot. [23] 'error through giving this name to *Trachelium.*'

Northants. Middleton Cheney, between Blisworth and Towcester, Cranford, etc. Gloster E., Warwick.

C. Trachelium, L. *Nettleleaved Bellflower.*

Top. Bot. 265. Syme, E. B. vi. 9. 867. Nym. 478.

Native. Sylvestral. Woods and hedges. Locally common. P. July, Aug.

First record, *Wm. Coles*, 1657.

2. **Ouse.** Fencott, *A. Fr.* Ardley, *Miss Rusher!*
3. **Swere.** Near Adderbury, Radway rare, *T. Bees.* Avenue Great Tew all white flowers, *A. Fr.* ? if planted. Tadmarton, *R. Fr.*
4. **Bay.** Tackley, Headington Wick Copse! *Bz.* Stow Wood! on that side next to Barton in the ditch on right hand side as you go in, and divers other places about the wood, *Wm. Coles.* Wood Eaton.
5. **Isis.** Tar Wood! Stonesfield! *Sib.* Near Ashford Mills! *Bz.* Mill Wood, Shipton, Wychwood, Ditchley.
6. **Thame.** Shotover Plantations! *Sib.* Magdalen College Copse, lane leading from south side of Shotover to Horsepath, *Bz.* Nuneham, *H. Bos.*
7. **Thames.** I have seen white specimen with the type at Shiplake, *Phyt.* vi. n.s. 480. Stokenchurch, *Hb. Bz.* Caversham, *Newb.* Fawley, *Prof. Daubeny.* Near Ewelme, Crowsley, Mongewell, Cane End, Hollandridge Lane, Woodcote, Binfield.

Berks. Wytham, Tubney, Unwell Wood.

* **C. rapunculoides, L.**

Syme, E. B. vi. 11. 869. Nym. 478.

Alien. Waste ground. Very rare. P. June-Aug.

'Nov., 1708, a troublesome weed in Darby's gardens at Hogsden [Hoxton, Middlesex], being brought out of some woods in Oxfordshire with roots of yew trees,' *Buddle's MSS.*

3. *Swere*. Adderbury Roadside, *Mrs. Roundell in Walker. C. Trachelium* occurs here, and was, as Mr. Beesley in the Banbury list suggests, likely mistaken for it.

4. *Ray*. Garden weed Bicester, *H. Boswell*, 1857-1860. Near Bicester in hedge, *Rev. E. Fox*, 1882. Near Holywell, garden escape.

5. *Isis*. Railside Handborough, garden escape.

References to Oxfordshire may be found in *Bot. Guide*, *New ditto*, *Sm. Fl. Br.*, etc. Top. Bot. 'reported in 23 Oxford.' Gloster, Warwick.

C. rotundifolia, *L.* *Harebell*.

Top. Bot. 263. Syme, E. B. vi. 13. 870. Nym. 479. Bz. 61.

Native. Glareal, etc. Heaths, dry banks, etc. Common. P. July-Sept.

First record, *Sib.* 1794. Bullington Green, Shotover, Stonesfield. Area general.

? *C. patula*, *L.*

Ambiguity. Syme, E. B. vi. 11. 869. Nym. 482.

'Our observant Henley correspondent has detected *C. patula* in this neighbourhood, i.e. Coppice Shiplake, two small plants in a meadow,' *W. G. P. in Phyt.* vi. 315. Bucks, Gloster, Warwick, local.

* *C. Rapunculus*, *L.*

Nym. 482. Alien. From Miss Badcock, Oct. 30, 1854, found in a grassfield near Oxford, *Bz. MSS.*

Berks. Bagley, Pile Hill, Wokingham, *Brit.* Bucks, Northants, extinct, or error. Warwick.

** *Campanula medium*, *L.* Nym. p. 475.

Alien. Chalk-pit Caversham, *A. French*.

SPECULARIA. *H.*

S. hybrida, *D C.* *Campanula hybrida*, *L.*

Top. Bot. 266. Syme, E. B. vi. 17. 874. Nym. 483.

Native. Agrestal. Cornfields chiefly on chalky or calcareous soil. Locally common. A. June-Sept.

First record, *Campanula arvensis erecta vel Speculum veneris minus*, *Ger. em.* Blackstone, 1737.

1. *Stour*. Near the Stourwell.

2. *Ouse*. Mixbury.

3. *Swere*. Cornfields Hanwell, beyond Neithrop, *Gull.* North

Newington, Constitution Hill *Prismatocarpus hybridus*, T. Bees.
Bodicote, A. Fr.

4. Ray. Heyford, Rev. E. Fox. Washford Stone Pits, Kirtlington, W. Wilson Saunders. Elsfield, Kirtlington, Blackthorn, H. Bos.
5. Isis. Amongst the corn in Ascot field and about Charlbury very plentifully, Blackstone MSS. St. Giles' Field, Purton. Church Handborough, Miss Tew. Common in light dry soil about Oxford, Bx. Cornfield near the Observatory, Hb. Br. Mus., Ed. Forster. Coombe, Rogers. Witney, W. Mathews. Bladon, Charlbury, Ditchley.
6. Thame. Headington! Cowley, Littlemore, Sib. Wheatley, Bx. Bullington! H. E. Garnsey. Iffley, H. Bos.
7. Thames. Caversham, W. Pamplin and A. Irvine. Goring, Watlington, Henley Park Hill, Nuffield, Stokenchurch, Whitechurch. Berks. Frilford, Cumnor, Streatley.

** *S. speculum*, D C. Nym. 483.

Alien. Cornfields amongst clover near Banbury, 1870, A. French.

[*Wahlenbergia hederacea*, R. Ivy-leaved Bellflower.

Syme, E. B. vi. 18. 875. Damp shady places. Very rare. P. July, Aug. Bagley Wood, Berks, Merrett, 1666. Still there in 1885. Wootton Heath, H. Bos.

Gloster E. and W., Warwick, ? if not introduced in the one locality.]

JASIONE. L.

J. montana, L. Sheep's-bit.

Top. Bot. 267. Syme, E. B. vi. 4. 863. Nym. 486. Bx. 373.

Native. Glareal. Dry sandy fields. Very rare. A. July-Sept. First record, Sib. 1794.

4. Ray. Stow Wood, H. Bos.

6. Thame. Nuneham, Sib. Shotover near the old enclosure, Bx. Baldon Heath, May 23, 1839, Daubeny.

7. Thames. Henley, Sib. Bledlow and Stokenchurch, H. Bos.

Berks. Boar's Hill. Bucks, Northants, very rare. Warwick.

The extreme scarcity of this plant in the county is remarkable.

ORD. XLV. ERICACEÆ, K.

ERICA. L.

E. cinerea, L. Fine-leaved Heath.

Top. Bot. 268. Syme, E. B. vi. 39. 891. Nym. 488.

Native. Ericetal. Heaths and wood-borders. Rare and absent from the greater portion of the county. Shrub. June-Sept.

First record, *Sib.* 1794.

1. **Stour.** Tadmarton Heath! *T. Ward*, 1863.

3. **Swere.** Epwell Heath, very rare, *T. Bees*.

5. **Isis.** Wychwood, *Rev. E. Fox*.

7. **Thames.** Checkendon Woods near Clump House, *Sib.* Withy Coppice.

Berks. Early common, *F. Tufnail*. Near Reading, *How*, 1650.

E. Tetralix, L. *Cross-leaved Heath.*

Top. Bot. 268. Syme, E. B. vi. 37. 889. Nym. 488. Bx. 418.

Native. Ericetal. Damp heaths. Very local and rare. Sh. June-Aug.

First record, *Sib.* 1794.

1. **Stour.** Tadmarton, *Mr. Ward*, 1863. Possibly planted here.

7. **Thames.** Binfield Heath, *Sib.* Still abundant here and also with white flowers, 1884.

Berks. Early common. Bucks, Northants very rare. Gloster, Warwick.

* * *E. Mackayi*, *Hook*.

Alien. Syme, E. B. vi. 38. 890. Nym. 488.

Planted on Tadmarton Heath, *A. French*. Also on Binfield Heath.

* * *E. vagans, L.* *Cornish Heath.*

Alien. Syme, E. B. vi. 41. 892. Nym. 489.

Tadmarton Heath, white flowers, planted, *T. Ward*, etc. Binfield Heath, 1884.

CALLUNA. Salisb.

C. erica, D C. *Ling. Heather.*

C. vulgaris, Slab. Top. Bot. 268. Syme, E. B. vi. 43. 894. Nym. 489.

Native. Ericetal. Heaths and dry sandy places. Local. Sh. July-Sept.

First record, *Sib.* 1794.

1. **Stour.** Tadmarton Heath, *T. Bees*.! Do. *var. coccynia, A. French* (!).

2. **Ouse.** Fritwell Heath, *A. Fr.*

3. **Swere.** Hooknorton, *Gull*. Epwell Heath.

4. **Ray.** Tackley Heath.

5. **Isis.** North Leigh! *Prof. Daubeny*, 1841. Finstock Heath, Ramsden Heath, Bruern Wood.

6. **Thame.** Shotover, *Hb. Bx. Hb. Lawson*! Bullingdon Bog, *H. E. Garnsey*.

7. **Thames.** Ibstone, Stokenchurch, *Irvine and Pamplin*. Nettlebed! *Hb. Rudge* in *Br. Mus.* Beacon Hill, Mongewell, Nuffield, Pyrton, Binfield with *var. alba*, Chinnor, Crowell Hill, wood near Stoke Row, Ipsden, etc.

Berks. Bagley, Boar's Hill, Frilford.

Var. incana, Syme. *Erica vulgaris hirsuta*, *Raii Syn.* 471.

5. **Isis.** Eynsham Heath, *Sib.*

6. Thame. Shotover, *Bz.*

7. Thames. Binfield.

VACCINIUM. L.

V. Myrtillus, L. *Bleaberry. Huckleberry.*

Top. Bot. 270. Syme, E. B. vi. 24. 870. Nym. 490.

Native. Heathy woods. Very rare. Sh. April.

First record, *Sib.* 1794.

5. Isis. Wychwood, *Rev. E. Fox*, extinct.

7. Thames. Checkendon Woods near Clump House, *Sib.* I have been unable to find this plant in the county.

Berks. Bagley Wood. Bucks, Brickhill, etc. Northants, absent. Gloster, W. Warwick.

[*V. Oxycoccus, L.* Cranberry, Sutton Park, etc., Warwick.]

[*V. Vitis Idæa, L.* Cowberry, with above, Warwick.]

** *Dabœcia polifolia, Don.*

Alien. Syme, E. B. vi. 33. 885. Planted Shrub.

Tadmarton Heath, *A. French*, planted; as also on Binfield Heath.

PYROLA, L.

P. minor, L. *Lesser Winter Green.*

Top. Bot. 272. Syme, E. B. vi. 49. 898. Nym. 492. Bx. 239.

Native. Sylvestral. Woods on the Chilterns. Local. P. June-Aug.

First record, *Pyrola rotundifol. major.* C. B. P. In *Sylva Sherbournensi comitatus Oxoniensis*, *Bobart*, 1696, in *Ray*, ed. ii. and *Morison*, iii. 505.

7. Thames. In a wood half a mile from Nettlebed, called Sonnedge, on the left hand soon after entering the wood, and in a wood called Lambridge near Sir Thomas Stapleton's, about three miles from Henley, and in many places in Mongewell woods, particularly in Scrubby Copse near Mr. Dobben's house at English, in the parish of Nuffield, about three miles from Nettlebed, and no doubt in many other of the woods in that neighbourhood, which are situate on a dry chalk soil. *Dr. Lightfoot's MSS.* in *H. O. Ray. Syn.* sub nom. *rotundifolia*, 1765. Woods between Nettlebed and Henley, *Sib.* probably from the foregoing record. Stokenchurch Woods, *Hon. Mr. Bagot!* Among moss in a wood one and a-half miles from Henley on High Wycombe Road, *Bz.* Crowell Hill, *Hb. Bz.* Wood adjacent to Nettlebed Common! *A. Fr.* Lambridge Wood! *Bolton King.* Queen's Wood, North End, Watlington, *F. Tufnail.* Fawley, *Prof. Daubeny.* Chinnor Woods, *Rev. B. D'Oyly Aptin.* Stokenchurch. 'Inflorescynce a raceme, Flowers numerous, pendant, Stigma five lobed, Corolla white, Leaves roundish, Flowers

globose, *media*, Prof. Daubeney. Saw it at Henley, where it was brought from the adjoining woods, 1713, 'media,' MSS. note in Ray Syn. *W. Pamplin*, Phyt. v. 153. Between Peppard and Exlade St. a few miles from Henley, towards Woodcote; pretty general in these extensive woods, but in large isolated patches, July 1, 1837, *media*, *W. Pamplin*. The specimen labelled *media* in *Hb. Lawson* Stokenchurch, without collector's name or date (probably Bobart's), is also *minor*. Found in Stokenchurch Wood on the right hand side going towards London, as I am informed by Mr. Bobart, *Ray. Syn.* ii. '*rotundifolia*,' also in *Huds. Fl. Ang.* 'Mr. Leland has ascertained this [i. e. *media*] to be the plant which Ray found in several places about Halifax, and I suspect this may be the *Pyrola* of Stokenchurch Woods, and other parts of Oxon generally mistaken for *minor*,' *Sm. Eng. Fl.* and *New Bot. Guide*. On the contrary it is *media* and *rotundifolia*, which have been erroneously recorded for *minor* and which alone is found in Oxfordshire. *Minor* also occurs in Vernal's Wood, Sunley Wood, Great Wood, Cane End Wood, Cowleaze Wood, upper end of Shirburn Wood, etc.

Berks. Near Ascot, *Watson*. Bucks, Gloster, Warwick (?).

MONOTROPA. L.

M. Hypopithys, L. Yellow Bird's-nest.

Hypopithys multiflora, Scop. Top. Bot. 273. Syme, E. B. vi. 53. 901. Nym. 493. Bx. 275.

Native. Sylvestral. Beech woods. Local, rather rare. Parasitic. P. July, Aug.

First record, 1677, *Verbasculi odore*, Plot, c. 6. p. 8. 146, and probably first as British.

3. Swere. Swerford Park, *Mrs. Davis*. Plantation beyond Fulling Mill, 1875, *T. Bees*.

4. Ray. Near Elsfield, *Bolton King*. Near Wood Eaton, *F. T. Richards*! Middleton Stoney, *Rev. E. Fox*.

5. Isis. Beneath a cedar, *Blenheim*, *F. Rogers*. Beech Plantation between Chipping Norton and Shipton, *A. Fr.* Near Lyneham Camp.

7. Thames. Stokenchurch! Plot. Do. in *Ray*, *Huds.* Between Nettlebed and Henley, *Hypopithys lutea*, 1765, *Dr. Lightfoot*. Do. Sib. 1794. In the woods near Stokenchurch, *Buddle MSS.* In the Beech Walk at Mongewell and in Mongewell Wood! Bx. 1884. Near Whitchurch, *Pamplin and Irvine*. Near Henley, *Hb. Lawson*! Nettlebed, *Bolton King*. Chinnor Wood! *Rev. B. D'Oyly Aplin*. Swincombe Woods.

Var. *hirsuta*, Horn. Nettlebed, *A. Fr.*

Berks. Type, Streatley, *F. Tufnail*. Basildon, *E. Forster*. Buckland,

Mr. J. Reddy. Park Place, *Dr. Noeteden.* Bucks, Northants, very rare. Gloster, Warwick, very rare.

ORD. XLVI. OLEACEÆ, Lind.

LIGUSTRUM. L.

L. vulgare, L. *The Privet.*

Top. Bot. 274. Syme, E. B. vi. 60. 904. Nym. 494. Bx. 119.

Native. Sylvestral. Hedges, thickets. Common, especially on the chalk and oolite, but occurs in all the districts. Shrub. June-Aug.

First record, *Sib.* 1794.

* *Syringa vulgaris, L.* *Lilac.*

Alien. Adderbury Road nearly opposite to Twyford Turn, originally planted in hedge, and on a hedgebank on the opposite side of the field, *A. Fr.* Hedge between Beckley Hill and Noke.

FRAXINUS. L.

F. excelsior, L. *The Ash Tree.*

Top. Bot. 275. Syme, E. B. vi. 57. 902. Nym. 495. Bx. 382.

Native. Woods, hedges, and thickets. Frequent in North and West Oxford, less common round Oxford and on the chalk. Tree. April, May.

First record, *Plot*, 1677. 'At Bicester the Ash frequently grows out of the bole of the Willow and sends its roots down the trunk, eventually extending itself so much as to burst the Willow in sunder, whose sides fall away, while what before were Ash roots now become the body of the Ash themselves, but this happens not to Pollard Willows,' *Plot*, 173.

* *Var. heterophylla, Vahl.*

Alien. Planted near end of Broad Walk, Christ Church Meadow, *W. T. T. Dyer in Journ. Bot.* vol. ix. Not more deserving a place in our Flora than *Platanus orientalis*, or other planted shrubs in the same locality.

ORD. XLVII. APOCYNÆÆ, Br.

VINCA. L.

* **V. major, L.** *Great Periwinkle.*

Comp. Cyb. Pr. 537. Syme, E. B. vi. 62. 905. Nym. 497. Bx. 158.

Alien. Hedgerows, etc. Rare. P. June-Aug.

First record, *Plot*, 1677. *Clematis Daphnoides major, Ger. em.*

3. Swere. Wroxton, *Gull.* Not wild, *T. Bees.* Wykeham Lane, between the Turnpike and the Park, *A. Fr.* Great Tew, adjoining the Park, *A. Fr.*

4. Ray. Magdalen College Walks, *Sib.*!
 5. Isis. Highway between Wolvercote and Yarnton in several hedges thereabouts, *Plot*, also *Gough*, *Milne*, *Ray*. Roadside Long Handborough, *G. Coles* in *Bx.*, do. *H. Bos*. Between Charlbury and Stonesfield, site of old cottage.
 7. Thames. Escape near Goring.
- Berks. Blewbury, Hampstead Norris, Wargrave, Cookham, *Brit.*
Bucks, Northants, well established. Warwick.

V. minor, *L.* *Lesser Periwinkle.*

Comp. Cyb. 246. Top. Bot. 275 'wild Bx.' Syme, E. B. vi. 63. 906. Nym. 497.

Denizen. Thickets, etc. Very doubtfully wild. Rare. P. March-Oct. First record, *Sib.* 1794.

3. Swere. Abundant in a plantation, Wroxton, *A. Fr.*

4. Ray. Magdalen College Walks, *Sib.* Water Eaton.

5. Isis. Right-hand side of road between Wolvercote and Yarnton, Cornbury! *Sib.* Do. *F. T. Richards*, 1884.

6. Thame. Shotover Plantation, *Bx.* 1831! 1884. In a copse between Sandford and Minchery, 1824, *Bx.* Shotover towards Horsepath.

7. Thames. Whitchurch, purple flowered form.

Berks. Kintbury, Benham, Wokingham, *Brit.* More or less wild in all the border counties.

ORD. XLVIII. GENTIANACEÆ, Lind.

GENTIANA. *L.*

G. Amarella, *L.* *Autumnal Gentian. Felwort.*

Top. Bot. 276. Syme, E. B. vi. 76. 917. Nym. 500.

Native. Pascual, etc. Limestone pastures and chalk downs. Locally abundant. A. July-Sept.

First record, *Plot*, 1677, 'with white flowers.

1. Stour. Sibford Heath, and a form with four corolla lobes only.
2. Ouse. Wattlebank beyond Fritwell, *T. Bees*. Cottisford Heath, *A. Fr.* Ardley roadside.
3. Swere. Swalecliffe Common, Chadlington, *T. Bees*. Near Worton Wood, *R. French*. Hooknorton, *T. Westcombe*.
4. Ray. Headington Wick, *Bx. MSS.* Kirtlington.
5. Isis. Burford Downs, *Sib.* *Gent. Prat. flore lanuginosa* in the said (Wychwood Forest) where it seldom grows above six inches high, *Blackstone*, 1737! 1885. Charlbury, *J. W. Albright*. Stonesfield, Handborough, near Ashford Mills, Ascot, near Ditchley, between Woodstock and Charlbury by roadsides with var. *alba*, between Witney and Burford.

6. **Thame.** Shotover! Bullingdon Green, *Sib.* Sandford, *R. Linton.* Kingston Hill, *Dr. Ayres.* Wheatley, Holton Quarries.

7. **Thames.** Caversham, *Irvine and Pamplin.* Goring, Whitechurch, Maple Durham, Beacon Hill, Chinnor, Grime's Bank, Nuffield, Chinnor, Ipsden, Crowell, Woodcote.

Berks. Abundant about Compton, etc., very large specimens near Ilsley.

G. germanica, W.

Native. Glareal. Dry and almost bare chalky downs. Very local.

A. Sept., Oct.

Syme, E. B. vi. 76. 918. Nym. 500.

First record, *the Author*, 1883.

7. **Thames.** In full flower Sept. 23, 1883. Roadside between Chinnor and Bledlow, Chinnor Hill. Chalky banks, Crowell Hill, Oxon, Sept. 1883. Crowell Hill is one of the Chiltern range, and within two miles of the Bucks border. The plant occurred abundantly on very bare chalky slopes, but although extremely variable in height, and in the number of flowers, yet the size of flowers seemed fairly constant. I did not notice any great difference in size of corolla lobes, nor did the length of germen seem worth consideration. The leaves are broader than those of *Amarella*, and the colour considerably lighter, more blue than purple, and often lilac. *G. Amarella* grew with it plentifully, but it required persistent search to find one in flower, whereas *G. germanica* was in profuse blossom, scarcely over its prime. There must be ten days' difference in the time of flowering of the two plants. A few plants were found with only four lobes to the corolla. While in the greatest abundance on slopes of almost bare chalk, still others were scattered in the grass, and some few were found on the tertiary above the chalk, *Rep. of Rec. Club*, 1883.

Berks. Streatley, *Phyt.* i. 381 (?). I have only seen large *Amarella* there. Bucks!

I am inclined to consider this distinct from *Amarella*, although the botanical differences, as in the case of *Guleopsis versicolor*, are difficult to express on paper. Although the plants varied in stature from one and a-half inch to nine inches, yet the size of the flower was very constant.

G. campestris, L. *Field Gentian.*

Top. Bot. 277. Syme, E. B. vi. 77. 919. Nym. 500.

Native. Pascual. Dry pastures. Very rare or extinct. A. Aug.-Oct.

First record, *Dillenius*, circa 1730.

6. **Thame.** Shotover, *Dillenius.* Do. *Sib.* Do. *Bx.* 1819 in *Purton.* No recent record.

Berks. Sulham Hills, *F. Tufnail*. Wash Common, Woodhay, *Brit.*
Northants, very rare.

CHELOEA. L.

C. perfoliata, L. *Perfoliate Yellow Wort.*

Blackstonia, Huds. Top. Bot. 280. Syme, E. B. vi. 72. 913. Nym.
501. Bx. 69.

Native. Pascual. Dry banks on chalk or stiff clay. Local and rather
rare. A. June-Sept.

First record, *Sib.* 1794.

5. *Isis*. Near Charlbury, *T. Westcombe*.

7. *Thames*. Penley Hangings! *Sib.* Maple Durham, *Burt.* in *Bx.*
1833. Between Caversham and Maple Durham! *A. Fr.* Near
Henley, Caversham Warren! *H. Bos.* Railside near Goring.

Berks. Eynsham, in a field on right-hand side of road about a quarter
of a mile from Bridge, *J. Benwell*. Also about three miles from
Oxford on clay, also in a stone-pit near the old road to Eynsham,
and about one and a-half miles from Eynsham Bridge, *Bx. MSS.*
About Appleton and Eaton, *Miss Hoskyns*. Basildon.

ERYTHRÆA. Rich.

E. Centaurium, P. *Centaury.*

Top. Bot. 279. Syme, E. B. vi. 67. 909. Nym. 501. Bx. 367.

Native. Pascual. Fields, dry banks, chalk downs, etc. Local and not
very common. A. June-Aug.

First record, *Wm. Coles*, 1657.

1. *Stour*. Tadmorton Heath, *A. Fr.*!

2. *Ouse*. Near Fritwell, *A. Fr.* Common about Cottisford, *R. C.*
Pryor. Ardley, *Miss Griffith*.

3. *Swere*. Beyond North Newington, *Gull*. Worton Wood, *R. Fr.*
Wigginton Heath, Chilgrove, *T. Bees*. Twyford Bridge, Fernhill
Lane, near King's Mill, *T. Brayne*. In a field by Oxford Highway
from Banbury, not far from Beechen Tree, and in a piece called
New Pasture in the common field of East Adderbury, not far from
the highway side, and in some of Walton Grounds which are on the
other side of the Cherwell, *Wm. Coles' Adam in Eden*. Somerton
railside.

4. *Ray*. Between Oddington and the Grange, Headington Wick
Copse, *Bx.*! Beckley, Shipton-on-Cherwell, Charlton-on-Otmoor.

5. *Isis*. South Leigh, *Sib.* *Chironia Centaurium*. Between Wood-
stock Park and Stonesfield! on gravelly soil between Church and
Long Handborough! *Bx.* Wychwood, *H. Bos.*! Shipton near
Wychwood, var. *alba* in Minster Wood, *T. Westcombe*. Ditchley,
Bruern.

6. **Thame.** Bullington Green! Shotover, *Sib.*! Nuneham, Brasenose Wood, *H. Bos.* Oxford border of Hell Copse, *A. Fr.*

7. **Thames.** Mongewell, Goring, Woodcote, Penley Wood, etc.
Berks. Bagley, etc.

E. pulchella, Fr.

Syme, E. B. vi. 68. 910. Nym. 502.

Native. Glareal. Heaths and moist gravelly places. Very rare. **A.**
July-Sept.

First record, *W. Baxter*, 1820, sub nom. *E. Centaurium*.

1. **Stour.** Tadmarton Heath, *F. French*.

5. **Isis.** Port Meadow, *W. Bz.* 1820, in *Herb. Bz.*

Warwick, very rare.

LIMNANTHEMUM. Gm.

L. peltatum, Gm. Yellow Fringed Buckbean.

L. nymphæoides, Link. *Villarsia nymphæoides*, Vent.

Top. Bot. 281. Syme, E. B. vi. 81. 921. Nym. 503. Bx. 161.

Native. Lacustral. Still water of rivers. Local. **P.** July, Aug.

First record, *Sib.* 1794. *Menyanthes nymphoides*, L.

3. **Swere.** Wroxton, planted, *A. Fr.*

5. **Isis.** Godstow Bridge, near Botley Bridge, Hinksey Ferry, *Sib.*
Near Medley Lock! *Bz. in Walk.* Bablock Hithe, *F. Westell.*
Between Botley Turnpike and Port Meadow, *Bz. in Purton.*
Blenheim, *F. Rogers.* Port Meadow.

6. **Thame.** Sandford and Nuneham! *Bz.*

7. **Thames.** At Henley Bridge.

Berks. Kennington and Radley, Cookham, Maidenhead. **Bucks.**
Northants, almost extinct.

MENYANTHES. L.

M. trifoliata, L. Bogbean. Marsh Buckbean.

Top. Bot. 281. Syme, E. B. vi. 79. 920 Nym. 503. Bx. 245.

Native. Uliginal. Bogs and slow streams. Local. Rare and decreasing. **P.** May, June.

First record, *Sib.* 1794.

3. **Swere.** Near King's Mill, *Gull.* By the 'Jack Brook' Broughton, very plentiful in a bog to the south of Shutford Bridge, *T. Bees.*

4. **Bay.** Behind Headington Hill (!), *Sib.* Upper Heyford, Cherwell side, *Bz.* 1849. Kirtlington, *Rev. E. Fox.* Headington Wick, *Hb. Lawson!* Stow Wood Bog, *T. Thurland.* Field near Parson's Pleasure, *H. E. Garnsey.*

5. **Isis.** Blenheim, *F. Rogers!* Canal near Louse Lock, *T. Thurland.*

Wychwood, by the Windrush near Witney, *H. Bos.* Near Minster Lovell, *F. Westell.*

6. Thame. Shotover, *Bx.* Bullingdon Green, *Sib.*

Berks. Wootton, *H. Bos.* Between old and new road to Eynaham, *Bx.* in *Walk.* Ifley Meadows, 1884.

ORD. XLIX. POLEMONIACEÆ, Vent.

POLEMONIUM. L.

* * *P. œeruleum*, L. *Jacob's Ladder.*

Alien. Top. Bot. [23]. *Bx.* 149. Nym. 503. Syme, E. B. vi. 83. 922.

5. Isis. Between the first and second milestone from Oxford to Woodstock, by roadside, *Bx.* in *Purton.* This Station was destroyed in 1835.

6. Thame. Near the Plantation, under the Ochre Pits, Shotover Hill, *Sib.* Not there now; never native in Oxford.

Berks. Windsor, between Reading and Speenhamland, *Brit.*

ORD. L. CONVULVULACEÆ, Vent.

CONVOLVULUS. L.

C. sepium, L. *Great Bindweed.*

Calystegia sepium, Br. Top. Bot. 281. Syme, E. B. vi. 86. 924. Nym. 504.

Native. Septal. Hedges and thickets, etc. Not uncommon, and generally distributed. P. June-Oct.

First record, *Sib.* 1794.

C. arvensis, L. *Bindweed.*

Top. Bot. 281. Syme, E. B. vi. 85. 923. Nym. 504. *Bx.* 58.

Native. Agrestal, etc. Cornfields, cultivated ground, railway banks, waste places. Abundant and universally distributed. P. June-Oct.

First record, *Sib.* 1794.

Two forms occur, one the *C. minimus spicæ foliis* of Merrett.

CUSCUTA. L.

* *C. Epilinum*, *Whe.*

Comp. Cyb. 538. Syme, E. B. vi. 89. 926. Nym. 507.

Colonist. Parasitic on flax. Very rare. A. July.

3. Swere. Hardwick Farm, 1869, *A. French.*

Flax is very rarely cultivated in this neighbourhood, and the Dodder much injured it in 1869.

C. europæa, L. *Dodder.*

Top. Bot. 282. Syme, E. B. vi. 90. 927. Nym. 507. Bx. 18.

Native. Septal. Hedges and bushes. Parasitic on shrubby and herbaceous plants. Very rare. A. July-Sept.

First record, *Sib.* 1794?

3. **Swere.** Hardwick Hill, 1837-8, very rare, *T. Bees.*

4. **Ray.** Between Islip and Water Eaton, *H. Bos.* Marston Lane, *MSS. note in Dr. Williams's copy of N. B. G.*

5. **Isis.** Near Cassington, on nettles in a hedge on the left-hand side going down a lane on south side of Church, at Church Handborough, 1833, *Bx.* Road to Hinksey, *R. Walk.* Stonesfield, *H. Bos.*

6. **Thame.** Iffley, *Sib.*, 'on nettles, heaths, etc.' (?). In an interleaved copy of *Sib.*, in Hort. Ox., Dr. Williams says Sibthorp was mistaken in *europæa*, it should have been *Epithymum*. I do not know what basis Dr. Williams had for his assertion—*europæa* was much more likely to occur at Iffley than *Epithymum*, although Sibthorp's *Cuscuta* possibly included both species. Stanton St. John, *Rev. E. Fox.*

7. **Thames.** Just below Goring Bridge, on nettles, *F. Tufnail.*

Berks. Between Botley and Ferry Hinksey, *H. Bos.* Between South Hinksey and Childswell Farm, on the blackthorns which it had entirely covered in a thick mass, 1833, *E. Jenner.*

C. Epithymum, (L) Murr.

Top. Bot. 283. Syme, E. B. vi. 91. 929. Nym. 507.

Native. Ericetal. Parasitic on furze, heather, etc. Rare. July-Oct. First record, *G. Gulliver*, 1820.

1. **Stour.** Tadmerton Heath, *A. Fr.*, 1866.

3. **Swere.** In a bean field near Wardington, very rare, *Gull.*, in *Bees.* list (could this have been *Trifolii*?).

6. **Thame.** Iffley, *Sib.*? *C. europæa.* Shotover, *H. E. Garnsey.*

Berks. Early Common, *F. Tufnail.* Tilehurst Common, *Walk.* Bucks, Northants, Harlestone. Gloster W., Warwick.

* **C. Trifolii, Bab.** *Clover Dodder.*

Comp. Cyb. 251. Syme, E. B. vi. 92. 929. Nym. 507.

Colonist. Parasitic on clover, etc. Sporadic. Not common. A July-Sept.

First record, *Baxter*, 1844.

3. **Swere.** On clover, Potter's Farm, Hog End, Bloxham, 1857. First field on footway to Drayton, from Huscote Hill, 1858, *Bees.* Tadmerton, *E. Walford.* Hanwell fields, *R. French.* Between Grove Mill and Milton, between Deddington and Milton, *A. Fr.*

4. **Ray.** Between Bicester and Middleton Stony, *A. Fr.*

6. **Thame.** Cloverfield, Littlemore, 1874, *W. Whitwell*.
 7. **Thames.** Aston Rowant, *Hb. Bz.*, 1844. *Whitchurch, Hb. Sherard*, no date. Near Watlington, 1858, Goring, see *Phyt.* iv. a. s. p. 101. *H. Boswell*. Kidmore End, *F. Tufnell*.
Berks. Unwell Road, *Hb. Lawson*. Ferry Hinksey, *H. Bos*. Bucks, Northants, Warwick.

ORD. LI. BORRAGINÆ, *Juss.***BORAGO.** *Tourne.***B. officinalis, L.** *Borage.*

Comp. Cyb. 548. Syme, E. B. vii. 112. 1114. Nym. 509. Bz. 66.

Alien. Waste ground. Rare, not naturalized. A. or B. May, June.

First record, *Sib.* 1794.

3. **Swere.** Oxford Road, Banbury, probably an escape from some garden, plentiful two or three years ago, now extinct, *T. Bees*. Broughton Allotments, Milton, Bloxham Road, never established, *A. Fr.*

4. **Bay.** The Parks, *Sib.*

5. **Isis.** Side of Banbury Road, between Oxford and Summertown, 1831, *Bz.* Waste ground near Oxford, *Hb. Lawson*. Near Eynsham, *H. Bos*. Stoney bank, between the Roman Villa and Stonesfield, *R. C. Pryor*. Port Meadow.

6. **Thame.** Wallingford, waste ground, Sandford.

7. **Thames.** Goring, *H. Bos*.

- Berks.** Blewbury, *Brit.*

SYMPHYTUM. *L.***S. officinale, L.** *Comfrey.*

Top. Bot. 327. Syme, E. B. vii. 115. 1114. Nym. 509. Bz. 101.

Native. Paludal. Meadows, ditches, marshes. P. May-Aug.

First record, *Consolida major flore rubro*. By Reading, *Merrett*, 1667, also *Symphytum flore Cineritio*, everywhere about Reading.

Common by all our riversides, and especially abundant in the Thames district.

With *Uredo Symphiti*, DC. about Iffley, *Bz.*

Var. *S. patens*, *Sib. calyce patente tubo corollæ breviori*. Syme, E. B. vii. 1116.

3. **Swere.** Adderbury West, *A. Fr.* Swerford.

4. **Bay.** Heyford to Kirtlington, Otmoor, Marston, etc.

5. **Isis.** Between High Bridge and Heyfield's Hut, *Bz.* Godstow,

Chadlington, *T. Bees*. Charlbury, Eynsham, abundant by river to Kelmscott.

6. Thame. Wheatley Bridge, *Blackstone*, 1737. Dorchester, Iffley, etc.

7. Thames. About Reading, *Merrett*. Goring, *Hb. Lawson*. Caversham, *Sib*. Sonning, Maple Durham, etc.

Dr. Sibthorp has made a new species of the red or purple flowered variety, distinguishing it by a shorter and spreading calyx, a mark which we and several of our friends have in vain tried to discover, *Sir J. E. Smith*, *E. B. t.* 817, *Dec.* 1, 1800. Mr. R. A. Pryor quite confirms Sibthorp in regard to the plants being distinct.

It may be well to draw attention to Sibthorp's description of *patens* as quoted above. Sibthorp separates the 'red flowered Comfrey' from *officinale* by the patent as opposed to the converging calyx and the shorter corolla tube. No mention is made in the Student's Flora or the Manual of Sibthorp's description, but emphasis is laid on the colour and on the rougher texture of the plant. In this, rather following Reichenbach's description, which I fail to see has special reference to Sibthorp's plant. It is quite probable that red and white flowered forms of both varieties occur; whether the characters given by Sibthorp are constant, is another matter.

Bright red, greyish blue, and green flowered forms also occur.

The Comfrey which appears in great abundance on the riverbank, rearing its bold form above the lowlier herbage. When in blossom—every branch decorated with clusters of pendant bell shaped flowers, varying in every shade of colour from white to deep purple—the Comfrey is one of the most ornamental among the many floral beauties that grace the water side. *Hall's Book of the Thames*, 24.

* * *S. asperrimum*, *Bieb.* *Prickly Comfrey.*

Alien. Waste ground near Iffley.

ANCHUSA. L.

* *A. sempervirens*, L.

Comp. Cyb. 282. *Syme*, E. B. vii. 111. 1113. *Nym.* 511. *Bx.* 48.

Alien. Waysides and waste places. B. June-Aug.

3. *Swere*. Beyond Andrew's Pits, *A. Beesley*. Crouch Hill, *T. Brayne*, about 1820. Roadside a long way from the village Mollington, *O. V. Aplin*.

4. *Ray*. Waste ground, near Rousham, *Miss Armetriding*.

LYCOPSIS. L.

L. arvensis, L. *Field Bugloss.*

Anchusa arvensis, M.B. *Top. Bot.* 328. *Syme*, E. B. vii. 109. 1111. *Nym.* 511. *Bx.* 21.

Native. Agrestal. Cultivated ground, hedgebanks, etc. Local. Not uncommon, especially on light sandy soil. A. or P. May-July.

First record, *Sib.* 1794.

3. Swere. Roadside between Broughton and Lower Tadmarton, Constitution Hill, *T. Bees*. Bourton, *A. Fr.*

4. Ray. Elsfield, *Rev. E. Linton*. With *Erysiphe asperifol.*, near Oxford, *Bx.* Headington, Beckley, Stow Wood.

5. Isis. Sarsgrove, *T. Bees*.

6. Thame. Thame, *Hb. Bx.* Cuddesdon, Wheatley, Shotover.

7. Thames. Goring, South Stoke, Maple Durham.

Berks. Boar's Hill, Tubney.

** *Pulmonaria officinalis*, *L.*

Alien. Plantations. Rare, not wild. P. March-May.

3. Swere. Hanwell Plantations, *Gull.* See note under *Galanthus*.

6. Thame. Woods at Marsh Baldon, *Rev. H. E. Fox*.

ECHIUUM. *L.*

E. vulgare, *L.* *Viper's Bugloss*.

Top. Bot. 330. Syme, E. B. vii. 88. 1095. Nym. 514. *Bx.* 189.

Native. Dry sandy fields, waysides, wall-tops, and calcareous pastures. Rather rare. B. June-Sept.

First record, *How*, 1650, 'neere Oxford.'

3. Swere. Bretch, *T. Bees*. Broughton Road, *Gull.* Hanwell, Tadmarton Quarries and var. *alb.* Churchyard walls Adderbury, Swalecliffe, *A. Fr.*

4. Ray. Headington Wick! Stow Wood! Kirtlington! Elsfield, *H. Bos.* Between Tackley and Gibraltar, *Bx.*

5. Isis. Near Oxford, var. *alba*, *Plot.* Formerly on walls in Gloucester Green, var. *alb.*, *Bx.* 'Without Frier Bacon's Study,' *Merrett*, var. *alb.* Eynsham, Dean, Wilcot, Charlbury, *J. M. Albright*. Mill Wood, Stonesfield and var. *alb.*, Woodstock, Handborough, railway near Wolvercote, Osney.

6. Thame. Shotover Hill, *Bx.* Wheatley, Stanton Quarries, Great Milton.

7. Thames. Henley, *A. Fr.* Ibstone, Stokenchurch, *Irvine and Pamplin*. Caversham, *Hb. Br. Mus.*, *J. Carroll*, 1849! Maple Durham, *A. Fr.* Penley Wood, near Dunsden, Goring, South Stoke.

Berks. Boar's Hill, Cothill, Tubney, Frilford.

LITHOSPERMUM. *L.*

L. officinale, *L.*

Top. Bot. 325. Syme, E. B. vii. 95. 1101. Nym. 518.

Native. Septal. Bushy places, especially on oolite soil. Local.
Rather scarce. P. May, June.

First record, *L. vulgare*, Park. Blackstone, 1737.

2. Ouse. Tusmore, *R. C. Pryor*.

3. Swere. Bloxham Road, Drayton Lane, *Bees*. Wykham, Crouch, *Reuben French*. Tadmarton, *T. Brayne*.

4. Ray. Headington Wick, *Sib.* 1884. Noke, Tackley Park, *H. Bos*. Stow Wood, *J. Dabney*! Piddington Wood, 1884.

5. Isis. Mountainous parts of Wychwood Forest, plentifully, *Blackstone*, 1737! 1885. Minster Lovell, Witney, abundant in Ditchley Wood, near Lyneham Camp.

6. Thame. Shotover Hill, *Sib.*

7. Thames. Caversham, *Newb.*

Berks. Frilford.

L. arvense, *L.* Corn Gromwell.

Top. Bot. 326. Syme, E. B. vii. 92. 1102. Nym. 518.

Native. Agrestal. Cornfields, especially on calcareous or chalky soil.

Rather common and generally distributed. A. May-July.

First record, *Sib.* 1794.

1. Stour. Sibford! Tadmarton Heath, *A. Fr.*

2. Ouse. Mixbury.

3. Swere. Shutford.

4. Ray. Kirtlington, Heyford, Marston, Elsfield, etc.

5. Isis. Woodstock, *Dabney*. Coombe, *Rogers*. Burford.

6. Thame. Aston, *Hb. Bz.* Bullingdon Green, *Hb. Br. Mus. col. Dyer*.

7. Thames. Goring, Woodcote, Grime's Bank, Nuffield, Watlington, Maple Durham, Chinnor, etc.

A one-flowered form with flower on summit of foot stalk was found by *Mr. Walker*.

MYOSOTIS. *L.*

M. palustris, *Roth.* Forget-me-not.

Top. Bot. 322. Syme, E. B. vii. 99. 1104. Nym. 519. Bx. 57.

Native. Paludal. Streamsides, wet places, ditches. Very common and generally distributed. P. June-Aug.

First record, *Mr. Coles* in *Adam in Eden*, 1657. 'In the ditch between the second water, next the "Holly Bush" at Oxford, and by the causeway that leads to Botley!'

'In no place do we remember to have met with the Forget-me-not in such beauty and luxuriance as in some of the fresh grassy nooks that we every now and then come upon, in the course of our voyage down the Thames,' *Hall*, p. 269.

Var. *M. strigulosa*, *Reich. Ex.* 2051.

4. *Ray*. Near Headington Wick.

A form with much darker foliage and darker blue flowers, occurring by the small stream which drains Bullingdon Bog, is worthy of further attention.

[*M. repens*, *Don*.

Syme, E. B. vii. 101. 1105. Badly coloured.

Berks. Beyond South Hinksey in a ditch near the road going up the hill. A little way beyond South Hinksey south-west of church, *Bz.* 1831. Bagshot Heath, *Watson*. Bucks, Gloster W., Warwick.]

M. caespitosa, *Schultz.* *M. lingulata*, *Lehm.*

Top. Bot. 324. Syme, E. B. vii. 98. 1103. Nym. 519.

Native. Paludal, etc. Wet marshy places and on damp heaths. Local much scarcer than *palustris*. P. June-Aug.

First record, *W. Baxter*, 1827.

3. *Swere*. Hanwell, Drayton, Spital Farm frequent, *T. Bees*.

4. *Ray*. Kirtlington great pond side, *W. W. Saunders*! Elsfield, *H. Bos.* Between Kirtlington and Tackley, Beckley, Bicester, Headington Wick, Heyford, Otmoor.

5. *Isis*. Bladon, *Rogers*. North Leigh, Handborough, Wychwood.

6. *Thame*. Side of gravel-pits and wet places near St. Clement's, especially on left-hand side of a footpath leading from the back of St. Clement's; between the Cowley and Henley Roads to Cowley Marsh in great abundance, 1831. I observed it in the same place four or five years ago, *Bz.* Shotover, *H. Bos.*! Albury, Wheatley railside, with white flowers on north side of Shotover.

7. *Thames*. Sanders' Green, Ibstone, Binfield, etc.

Berks. Bablock Hithe, *H. Bos.* Boar's Hill, Frilford.

M. intermedia, *Lk.*

M. arvensis, *Hoffm.* Top. Bot. 325. Syme, E. B. vii. 105. 1108. Nym. 520.

Native. Agrestal, septal. Woods, cornfields, waste ground, etc. Common and universally distributed. A. May-July.

First record, *Sib.* 1794. And var. *nana* 'on walls.'

Var. *umbrosa*, *Bab.*

4. *Ray*. Woods near Tackley.

5. *Isis*. Wychwood.

7. *Thames*. Penley Wood, woods near Goring.

M. collina, *Hoffm.*

Syme, E. B. vii. 106. 1109. Nym. 520.

Native. Glareal, etc. Dry banks, walls, and heaths. Not uncommon.

A. or B. April-June.

First record, *W. Baxter*, 1831, '*versicolor*.'

1. *Stour*. Tadmarton.

3. *Swere*. Bretch, *E. Walford*. Broughton, common on walls about Banbury, *A. Fr.*

4. *Ray*. Elsfield, *H. Bos*. Wood Eaton, Kirtlington, Stow Wood.

5. *Isis*. Wychwood, *Hb. Lawson*. Cornbury, *T. Westcombe*. Handborough.

6. *Thame*. Cowley, *Newbould*. Shotover, *Hb. Lawson*. Holton Stone Pits, Iffley, Littlemore.

7. *Thames*. Henley, *Hb. Bx.*, 1831. Sub nom. *versicolor*. Whitchurch, Woodcote, Maple Durham.

Berks. Abingdon, *H. Bos*. Hinksey, Frilford, etc. Two forms occur.

***M. versicolor*, Sm.**

Top. Bot. 325. Syme, E. B. vii. 118. 1110. Nym. 520. Reich. Exs. 1174.

Native. Glareal, etc. Heaths, hedgebanks, dry sandy fields. Local.

A. or B. April-June.

First record, *G. Gulliver*, 1821.

1. *Stour*. Tadmarton Heath.

3. *Swere*. Near Adderbury, *Gull*. Holywell Spring, *T. Bees*.

5. *Isis*. Wychwood.

6. *Thame*. Shotover, *Dr. Williams*! Iffley, *Rep. of Rec. Club*, 1881.

7. *Thames*. Ibstone, Lewknor, Woodcote, Binfield.

Berks. Boar's Hill, Bagley, Engwood, etc.

Sibthorp's var. *nana* of *arvensis* may have intended this. Two forms occur.

[*M. sylvatica*, *Ehrh.* Gloster, Warwick.]

** *M. dissitiflora*.

Naturalized on railway-bank near Littlemore, 1885.

CYNOGLOSSUM. L.

***C. officinale*, L.** *Hound's-Tongue*.

Top. Bot. 329. Syme, E. B. vii. 118. 1118. Nym. 520.

Native. Viatical, etc. Waysides, dry woods, etc. Local. B. or P. June-Aug.

First record, *Morison*, iii. 448. Circa Readingum oppidum idem floribus candidis observavimus, 1699.

3. *Swere*. Bloxham Road, *Gull.*, do. Cobb's Plantation extinct now, *T. Bees*. Nardwick Hill, *T. Brayne*.

4. *Ray*. Elsfield, *Walk*. Kirtlington, fields near Summertown.

5. *Isis*. Very abundant in pastures between Wychwood and Burford! Between six and seven miles from Oxford to Banbury, *Blenheim*

Park ! Long Handborough ! Between Stonesfield and Woodstock !
Bx. Leafield ! *A. Fr.* Cornbury Park, *Hb. Lawson* ! Woodstock !
W. Whitwell. Crawley, *F. Westell.* Shipton in Wychwood, very
 abundant in Cornbury Park.

7. Thames. Henley, *A. Fr.* Crowsley Park.

Berks. Abingdon, Hagbourne, *Brit.*

Morison says that a whole family at Oxford partook of the boiled leaves of this plant by mistake for those of Comfrey and were shortly after seized with sickness, sleepiness, and stupor, which symptoms continued alternately for forty hours with such severity that one died.

Var. *C. subglabrum*, Syme.

5. *Isis.* Woodstock and Wychwood plentiful and often mistaken for the next species, to which it bears some resemblance.

The *Cynoglossa folio virenti*, *J. B.* iii. 600 of *Ray's Synopsis* is represented in the Dillenian Herbarium by the subglabrous form of *officinale*. In Wychwood Forest a form of this occurred with narrow calyx lobes, which may be a hybrid with *montanum*, the other characters of the plant were decidedly *officinale*.

***C. montanum*, Lam.**

Top. Bot. 329. Syme, *E. B.* vii. 119. 1119. Poor figure. *Nym.* 521. *Reich. Exs.* 241.

Native. Sylvestral. Open places in woods. Very local and rather rare. *B.* June, July.

First record, *Sib.* 1794. *C. sylvaticum*, Jacq.

5. *Isis.* Wychwood, *Sib.* (Eng. Bot. plate from Oxford specimen sent by Dr. Abbott.) Still there 1885. Blenheim Park Plantation, *Dr. Williams.* Near Woodstock, *Dr. Daubeny*, 1841. Small plantation near Woodstock, one specimen 1883. Near Cornbury Quarries in Wychwood, scattered over a small area.

Northants, rare or extinct. Gloster E. Warwick, very rare.

* * *Echinosperrum Lappula*, *Leh.*

Alien. Swerford Park, *Rev. E. Fox.*

ORD. LII. SOLANACEÆ, Bart.

DATURA. L.

* ***D. Stramonium*, L.** *Thorn-apple.*

Casual. Comp. Cyb. 538. Syme, *E. B.* vi. 103. 935. *Nym.* 523. *Bx.* 121.

First record, 'near Reading,' *Turner*, 1568.

3. *Swere.* Wroxton Park, *A. Fr.*

4. *Ray.* Place yard Bicester, Charlton-on-Otmoor, *G. Woodward* in *Bx.*

5. *Isis*. Near St. Philip's Church, Oxford, *Rev. F. Bennett*. Waste ground, Osney.

7. *Thames*. Near Reading in a meadow, *Bx.* Northants, Warwick.

* *D. Tatula*, *L.*

Casual. Waste ground, Steeple Aston, 1885, *B. S. Ogle, Esq.*

HYOSCYAMUS. *L.*

H. niger*, *L. *Henbane.*

Top. Bot. 283. Syme, E. B. vi. 106. 936. Nym. 524. *Bx.* 321.

Native. Viatical. Roadsides, waste ground. Rare and sporadic. B. May-Aug. Apparently much rarer than formerly.

First record, *Sib.* 1794. Unlocalised.

3. *Swere*. Banbury, Bloxham Road, *Gull.* Frequent, *Bees.* Berry Moor, *R. Fr.* Crouch Hill, *A. Fr.* Wroxton, *T. Brayne.*

4. *Ray*. Upper Heyford, 1831, *Bx.*, 1880, *Rev. E. Fox.* Merton near the Church, *A. Fr.* The Parks, *H. E. Garnsey.* Between Bicester and Ardley, Stow Wood, *H. Bos.* Elsfield.

5. *Isis*. Blenheim Park, frequent, *W. Whitwell.* Wychwood, *H. Bos.* Minster Lovell, *F. Westell.*

6. *Thame*. Cheney Lane, Bullingdon Green! Cowley Marsh, 1831, Shotover, *Bx.* Burcote near Dorchester! *Rev. F. Bennett.*

Berks. Ilsley, Compton, Elcot, Bagley, *Brit.* Cumnor. Bucks, Brill Hill. Northants, Cosgrove, etc. Gloster, *E.* Warwick, ! if native.

** *Lycium vulgare*, *Dum.* *L. barbarum*, *L.* *Tea Plant.*

Cyb. Br. ii. 187. Syme, E. B. vi. 98. 933. Nym. 524.

Alien. Hedges and walls in villages. Lately naturalized. June-Aug.

2. *Ouse*. Allotments' hedge, Hardwick.

3. *Swere*. Drayton Road, *Miss Rusher.*

5. *Isis*. Ramsden, near railway crossing to Tumbling Bay.

7. *Thames*. Near the Flowing Spring, Eye and Dunsden, *A. Fr.*

ATROPA. *L.*

A. Belladonna*, *L. *Deadly Nightshade.*

Top. Bot. 285. Syme, E. B. vi. 100. 934. Nym. 524. *Bx.* 10.

Native. Sylvestral. Woods on chalk or oolite. Local.] P. June-Aug.

First record; *Solanum lethale*, Park. *Blackstone*, 1737.

5. *Isis*. In several parts of Wychwood Forest, *Blackstone!* Witney! *Sib.* Woodstock Park near the Monument, *Bx.* Queen's Wood in Blenheim, near the road to Handborough, Stephill, Long Handborough, *Mr. J. Long* in *Bx.* Near Freeland, woods above the Evenlode, near Pinsley Wood plentiful.

7. **Thames.** Between Nettlebed and Henley! *Sib.* Maple Durham, *Hb. Br. Mus. col.*, *H. Trimen!* Near the roadside going up Stokenchurch Hill! *Dr. Ayres.* Between Pangbourne and Goring, Mr. Syme showed it me, *Newb.* Near Henley, fine, *H. Bos.!* Whitchurch.

Berks. Ilsley, Tilehurst Common, Streatley, Basildon. Bucks, Northants, Gloster E., native. Warwick, denizen.

SOLANUM. L.

S. Dulcamara, L. *Bitter-sweet.*

Top. Bot. 285. Syme, E. B. vi. 95. 930. Nym. 525. Bx. 110.

Native. Septal. Hedges, brooksides, etc. Abundant and generally distributed. P. June-Aug. Occurs plentifully on Merton Walls and in Magdalen Water Walks.

First record, *Sib.* 1794.

With white flowers near Oxford, *Rev. W. Bree in Purton.* Do. between Oxford and South Hinksey, *Bx.* Do. Iffley, *W. Whitwell.* Marston, Dorchester, Tackley.

A very tomentose form from an old wall of Stonesfield Slate, Oxford, *Rep. of Ex. Club*, 1872, *Rev. H. E. Fox.* A very downy prostrate form occurs on the debris from the Slate Quarries at Stonesfield, and near Fawler.

S. nigrum, (L.) W.

Top. Bot. 284. Syme, E. B. vi. 97. 931. Nym. 526.

Native (?). Viatical. Cultivated ground. Rather rare (I should consider it a colonist in Oxford). A. July-Oct.

First record, *Sib.* 1794.

3. **Swere.** Banbury, garden weed, not common, Grimsbury Wharf, certainly only a casual in this neighbourhood, *A. Fr.* Adderbury, *E. Walford.*

4. **Ray.** Upper Heyford, *Rev. E. Fox.* Islip, Marston.

5. **Isis.** Tar Wood, *Rev. E. Fox.* Garden ground St. Giles', *F. Bennett.* Wolvercote, Port Meadow, Bladon, Woodstock.

6. **Thame.** Thame, *Hb. Bx.* Cowley, Dorchester, Iffley.

7. **Thames.** Goring.

Berks. Wallingford, Marlow, Wokingham, *Brit.*

S. melanocerasum, W. *Reich. Fl. Germ.*, 1631. *S. pterocaulon.*

Alien. Waste ground. Rare. A. July, Aug.

5. **Isis.** Near the Great Western Railway, Osney.

ORD. LIII. PERSONATÆ, L.

VERBASCUM. L.

V. Thapsus, L. *Aaron's Rod. Great Mullein.*

Top. Bot. 287. Syme, E. B. vi. 110. 937. Nym. 527.

Native. Viatical. Roadsides, banks, etc. Principally on oolitic or chalky soil. Locally common. B. June-Aug.

First record, *Sib.* 1794.

3. Swere. Wickham, *T. Brayne*. Staley's Meadows, common, *Gull*. 'I cannot concur in the frequency of this plant,' *A. Fr.* A solitary specimen at Bodicote, *A. Fr.*

4. Ray. Near Gibraltar Rock, *Bx.* Stow Wood, *H. Bos.* Kirtlington, Elsfield.

5. Isis. Wychwood, *Rev. R. Linton*. Between Stonesfield and Ashford Mills! *Bx.* Burford, Godstow, Chadlington, Witney.

6. Thame. Cheney Lane, Wheatley! Shotover! *Bx.* Bullington, *H. Bos.* Stanton Quarries, Haseley, Holton.

7. Thames. Caversham, *Irvine*. Stokenchurch, *Hb. Bx.* Lewknor, *A. Fr.* Goring, Woodcote, Mongewell, Nettlebed, Assenton, Ipsden, Crowell, Henley Park Hill, Dunsden, Ilvingden Farm, Whitchurch.

Berks. Bagley, *H. E. Garnsey*. Boar's Hill, Wytham.

V. nigrum, L. *Black Mullein.*

Top. Bot. 287. Syme, E. B. vi. 114. 940. Nym. 530. *Bx.* 85.

Native. Viatical. Waysides, fields, borders. Local. Almost confined to the chalk. P. June-Aug.

First record, *Sib.* 1794.

3. Swere. Souldern Churchyard (?), strayed from Vicarage Garden, *T. Bees*. Do. in a field near the Rectory, *E. C. Pryor*. Near Bignell and Souldern, *G. Woodward, Esq.* Solitary specimen Bodicote Road, *A. Fr.*

4. Ray. Near Bicester, *T. Brayne*.

5. Isis. Between Fawler and Cornbury Park in abundance, *G. Coles, Esq.* Stonesfield, *Rev. R. Linton*.

6. Thame. Forest Hill, *R. Walk*.

7. Thames. Nettlebed, Henley, Stokenchurch, *Sib.* Caversham Lane and Churchyard, *Irvine*. Near Henley on the Wycombe Road, *Bx.* Chalk-pit in 'Flowing Spring,' *A. Fr.* Caversham, *Hb. Br. Mus. Col., J. Carroll*, 1849! Goring, *H. Bos.* Checkendon, Crowsley, Mongewell, Ipsden, Dunsden, Ilvingden, etc.

Berks. Tubney, Streatley, Wootton, Appleton, etc.

*** V. Blattaria, L. Moth Mullein.**

Comp. Cyb. 253. Syme, E. B. vi. 116. 942. Nym. 528.

Denizen. Waysides, etc. Rare and relic of cultivation. B. July-Sept.

First record, *V. octavam Blattaria phænicea*. Purple Moth Mullein near Oxford, Mr. Thomas in *How's Phytologia*, 1650—if this be rightly referred to this species.

3. Swere. Spontaneous on a wall, Adderbury, 1874, A. Fr.

4. Ray. Middleton Stoney, F. T. Richards, Esq.

5. Isis. Roadside near Woodstock, A. Fr.

Berks. Binfield, B. G. Chieveley, Brit.

[V. Lychnitis, L. Wargrave, Brit. Berks.]

[V. virgatum, With. Harleston. Northants.]

SCROPHULARIA. L.

[*S. vernalis*, L., has been quoted as an Oxford plant on faith of the following reference—'*Scrophularia flore luteo* Brownwort with yellow flower. In Oxfordshire.' This has never been confirmed. It was either an escape from cultivation or Bobart's variety of *nodosa*.

Berks. Near Bucklebury in great plenty, Mr. Sheffield, MSS.]

S. nodosa, L. Figwort.

Top. Bot. 293. Syme, E. B. vi. 123. 949. Nym. 533. Bx. 385.

Native. Sylvestral. Woods, etc. Generally distributed and not uncommon. P. June, July.

First record, '*Scroph. major*. Great Figwort. The Great Scroph. groweth plentifully in shadowie woods . . . and also in Stowe wood, and Shotover neere Oxford.' *Ger.* 1597, p. 579; do. in *Ger. an. Coles' Adam in Eden*, etc.

Berks. Ray, ii. p. 161. *Scrophularia major, caulibus, foliis et floribus viridibus*, D. Bobart. 'Found near Cumner. Common Figwort is called Brownwort from its remarkable brown colour. This has nothing of brownness in it.' Archbishop Whately refound this in 1830, and specimens were put in the Botanic Garden, where they remained unchanged by cultivation, Baxter, 1835. This form was erroneously referred to *S. Erharti* in *Sm. Eng. Fl.* Specimens in *Herb. Morison*, probably Morison's own, and in *Hb. Dubois* show that it is an abnormal form of *nodosa*, which Mr. R. C. Pryor, in *Journ. Bot.* vol. v, suggested should be known as *S. nodosa*, var. *Bobarti*.

S. oblongifolia, Lois. Water Betony.

S. Balbisti, K. (non Horn). *S. aquatica*, L. in pt.

Top. Bot. 294. Syme, E. B. vi. 120. 947. Nym. 532.

Native. Paludal. Brooksidcs. Damp woods and wet places. Common. Occurs in all the districts. P. June-Aug.

First record, *Sib.* 1794. *S. aquatica*, L.

Wasps frequent the flowers of this and the forgeing species, which, Mr. Grant Allen has pointed out, have become specialised for their use.

[*S. aquatica*, L. *S. umbrosa*, *Dum.* *S. Erharti*, *Stev.* Warwick. Very rare.]

DIGITALIS. L.

D. purpurea, L. Foxglove.

Top. Bot. 295. Syme, E. B. vi. 126. 952. Nym. 535. Bx. 113.

Native. Bushy places, waysides, woods. Local. Rare in north Oxon. Locally frequent on the sandy soil of the Chiltern table-land. B. June-Sept.

First record, *Wm. Coles*, 1657.

1. Stour. Tadmarton Heath ! *A. Fr.*

2. Ouse. Frumere, *R. C. Pryor.* Mixbury, *Lord Selborne.*

3. Swere. Near Mill Farm, Epwell Heath, Worton Wood, rare, *T. Bees.* Hooknorton, hardly wild, *R. Fr.*

5. Isis. Wychwood, *T. Bees.*

6. Thame. Shotover to Wheatley.

7. Thames. Stokenchurch ! between Nettlebed and Henley ! *Sib.* Between Stokenchurch and Wycombe, *Wm. Coles.* Abundant from Nettlebed to Lewknor, left behind at Lewknor, *A. Fr.* Not plentiful about Caversham, *Phyt.*, n. s. ii. 340. Whitchurch, Woodcote, Chinnor, Binfield, Crowsley, Witley Coppice, Cane End, Queen's Wood, Sunley Wood, Checkendon, Ipsden, etc.

Berks. Birch Copse, Powder Hill Copse, Streatley.

ANTIRRHINUM. L.

* *A. majus*, L. Snapdragon.

Syme, E. B. vi. 131. 953. Bx. 169. Nym. 537. Comp. Cyb. 541. Alien. Old walls. Rare. P. June-Aug.

3. Swere. Garden wall, Castle Street, Banbury, Milton, *A. Fr.*

4. 5. Oxford old walls not uncommon, Merton ! *Sib.* New Coll. ! Jesus Coll., *Walk.* St. John's Garden walls, and var. *alb.* walls in the New Coll. Lane ! etc., *Bx.* Holywell, *R. C. Pryor.* 'Trinity had never been unkind to me. There used to be much Snapdragon growing on the walls opposite my freshman's rooms there, and I had for years taken it as the emblem of my own perpetual residence unto death in my University,' *Cardinal Newman's Apologia.* Wadham and Magdalen Coll. walls.

6. Thame. Great Milton, Tetsworth.

7. Thames. Caversham, *A. Fr.* Goring.

Berks. Walls of Reading Abbey.

A. Orentium, L. *Corn Snapdragon.*

Syme, E. B. vi. 131. 954. Nym. 536.

Colonist. Agrestal. Cornfields. Very rare. A. July-Sept.

First record as a wild plant, *Rev. E. Fox*, about 1850.

6. **Thame.** By the roadside close to Shotover Plantation, between the Temple and Shotover House, with *Aster Chinensis*, *Malcolmia maritima*, *Reseda odorata*, and *Malva crispa*, outcasts from the garden, *Hb. Bx.* 1826. Near Oxford, *Rev. R. Linton*. Dorchester, *Mrs. Blunt*.

7. **Thames.** Near Goring one poor specimen, *Rev. E. Fox*. On a rough field half a mile or so west of Caversham, sparingly with *Torilis infesta*, *F. A. Lees*; see *Rep. of Rec. Club*, 1883.

Berks. Near Newbury, *H. Bos.* Wargrave, Woodhay, Cookham, Elcot, *Brit. Bucks.* Northants very rare. Gloster E. Warwick, colonist.

LINARIA. L.**L. vulgaris, Mill.** *Yellow Toad-flax.*

Top. Bot. 297. Syme, E. B. vi. 141. 962. Nym. 537.

Native. Septal, etc. Hedges, waysides, and sandy fields. Local. P. July-Sept.

First record, *Sib.* 1794, *Antirrhinum Linaria*, L.

1. **Stour.** Tadmarton Heath.

2. **Ouse.** Finmere, Mixbury, *R. C. Pryor*. Ardley.

3. **Swere.** Broughton, Drayton, *Gull.* • Hanwell, Swalecliffe, common in cornfields about Banbury, *A. Fr.* Variety with two to four spurs between Milton and Barford, *A. Fr.* 1870.

4. **Ray.** Summertown Road, *Bx.* Beckley, *Rev. Moyle Rogers*. Rare near Oxford. Near Weston-on-the-Green. Between Heyford and Kirtlington, with large flowers, not *speciosa*.

5. **Isis.** Stanton Harcourt, South Leigh, *Sib.* Stonesfield, *Bx.* Between Church and Long Handborough, *Bx.*! Freeland, Blenheim, Ditchley, Bruern, with large flowers.

6. **Thame.** Bullingdon, *H. Bos.* Dorchester, *Sib.*! Shotover.

7. **Thames.** Goring, Stokenchurch, Sunley Wood, Henley Park Hill, South Stoke, Caversham, Dunsden, etc.

Berks. Frilford, Boar's Hill, Lowbury.

*** L. purpurea, Mill.** *Purple Toad-flax.*

Syme, E. B. vi. 139. 960. Comp. 541. Nym. 539.

Alien. Old walls. Rather rare. June-Aug.

First record, *W. Baxter*, 1831.

3. **Swere.** Garden wall in Castle Street, Banbury, Canalside, Hardwick, Broughton, *A. Fr.* Hardwick Weir, 1866, *T. Bees*. Swalecliffe.

4. Ray. Walls of Rose Lane, Long Wall, Magdalen College, Islip, etc.
5. Isis. Near G. W. Station on rubbish heap, alien, not likely to become fixed, *Phyt.* iv. 101, *H. Bos.* On walls near the Castle, and on old walls near the Church at Yarnton, side of Banbury road between the Parks and the Diamond house, 1831, *Bz.*
6. Thame. Iffley Churchyard! *W. T. Dyer, Journ. Bot.* ix. Great Milton, Wheatley.

***L. repens*, Mill.**

L. striata, D C. *Antirrhinum repens*, L.

Top. Bot. 296. Syme, E. B. vi. 139. 961. Nym. 539.

Native. Waysides, cultivated fields, dry places. Abundant on the chalk where free from tertiary deposits, but thins out easterly. P. June–Oct.

3. Swere. Railside near King's Sutton (Northants?), *W. Patey*. Introduced here by trains bringing seeds from the south.

5. Isis. Wychwood, *J. M. Albright*. I have not seen specimens collected there, and have been unable to find it.

7. Thames. Found also by *Mr. Dandridge* on the sides of a hill called Marvell Hill, by Henley Townside, and by *Mr. J. Sherard* on the Church walls at Henley, *Ray, Syn.* ed iii. p. *282, *Linaria cœrulea foliis brevioribus et angustioribus*. First record, 1724, *J. Sherard*. Between Ewelme and Swincombe, *Sib.* Near Hailey, where it was observed in the time of Dillenius, *Sm. Eng. Fl.* Henley, from whence the specimen figured in *Hort. Eltham* was obtained. Henley Churchyard, *Hb. Dillen.*, col. *Dr. Richardson of Bierly*. Still at Henley, *Mr. Sheffield*, 1763; do. 1884. Stokenchurch, Ibstone, *Pamp. and Irvine*. Fine patch near Maple Durham, *A. Irvine*. Between Caversham and Maple Durham, *A. Fr.* Stokenchurch Hills, *Hb. Bz.* Goring, Watlington, *H. Bos.* South Stoke, see *Rep. of Rec. Club*, 1880. Pyrton, Nuffield to Mongewell, Bix to Assenton, Wellplace, Ipsden, near Crookley Green, Ilvingden Farm, Whitechurch.

Berks. Shooter's Hill, *Walk.* Streatley, Unwell Woodside, Moultsford, between Moultsford and Wallingford abundant, Lowbury.

Dillenius described a variety—*Linaria angustifolia flore cinereo striato H. Elth.* *Varietas cum foliis angustioribus et brevioribus verticillatum ab imo ad summum nascentibus, quaternis et quintis ad singula geniculo foliis oppositis.*

Hæc var. vulgo nascitur, foliis nempe inferius ternis et quaternis superius alternis, longioribus et nonnihil latioribus, promiscue nascentes observata fuerunt prope Henley in Parco Dom. Hamiltoni a Dom. Littleton Brown qui eo loco Cambroso flores satis odoratos Periclymeni instar observavit 1733 Junio. Respecting this Dr. Littleton Brown writes, 'It grows

sometimes a yard high. Y^e leaves are not set confusedly on y^e stalk as in y^e common, but in bundles at distances, y^e stalks are brittle, much branched towards y^e top, and y^e flowers stand not thick clustering together, but more sparsely and at greater intervals, and are of a pale blew streaked all along keel with a deeper . . . y^e lower lip at y^e gaping is spotted with yellow, an exact description of ye Henley one.'

The foregoing description by Dillenius is not remarkable for lucidity and elegance, and the form it refers to is by no means uncommon, the barren stem frequently having verticillate leaves (see E. B. plate), but the Honeysuckle odour I have failed to perceive.

The colour of the flowers is said in the Student's Flora to be violet, in Bab. Man. white with blue veins, and in Syme, E. B., white with purple veins, the palate with a yellow spot. The colouring of the plate does not bear out the description, some reminiscence of *alpina* being apparently present in the mind of the colourist.

The colour of the flowers is indeed very variable, more frequently it is as Babington describes it, but forms occur with dark purple flowers without striations, with violet blue flowers on which striations can be seen; white flowers with yellow palate and striæ nearly absent; and a very beautiful form with coral pink flowers and few striations, these all had the typical shape of *repens*.

Bucks, Hambledon, Henley, etc. Northants introduced. Warwick garden escape.

L. repenti-vulgaris.

Several hybrids between *vulgaris* and *repens* have been found. One, near Goring, had the flowers only slightly larger than *repens*, but the colouring was as it is in *vulgaris*, the spur was as in *repens*; altogether the *repens* parentage was much the stronger. Another near Wallingford had the spur of *vulgaris*, with larger flowers than typical *repens*, and the flowers distinctly striate. A third from arable ground near Goring had flowers half an inch long, spurs more than a quarter of an inch, flowers striate but with orange palate and pale yellow under lip—this may be identical with the Irish plant named *sepium* by Prof. Allman. This latter form occurred also at Lowbury in a turnip field.

L. viscida, Manch.

L. minor, Dsf.

Top. Bot. 297. Syme, E. B. v. 143. 966. Nym. 542.

Native. Agrestal. Cultivated ground, very fond of railway ballast. Rather common and widely distributed. A. May–Sept.

First record, Sib. 1794. *Antirrhinum minus*, L.

2. Ouse. Ardley, H. E. Garnsey.

3. Swere. Cornfields just above Broughton Fulling Mill, rare, T. Bees. Near Shutford, T. Brayne, 1820. Near Swalecliffe

Grange, 1859. Everywhere along the line, *T. Bees.* *MSS.*, 1871. Somerton.

4. **Ray.** Between Kirtlington Park and village of Weston! *W. W. Saunders.* Elsfield, *R. Linton.* Stow Wood, *Hb. Lawson.* Near Oxford in cornfields and gardens, *Bz.* in *Purton.* Upper Heyford, *Rev. E. Fox.* Kirtlington, Headington Wick, Beckley, etc.
 5. **Isis.** South Leigh, Stanton Harcourt, *Sib.* Woodstock Road, Witney, *H. Bos.* Ditchley, Bampton.
 6. **Thame.** Between St. Clement's and Cowley Marsh, between Bullingdon Green and the Asylum, *Bz.* 1823. Wheatley, *W. Whitwell.* Littlemore, Cuddesdon.
 7. **Thames.** Nettlebed, Henley, *Hb. Bz.* Ilvingden, Goring, Caversham.
- Berks. Moulsoford, Frilford.

L. spuria, Mill. *Fluellen.*

Top. Bot. 295. Syme, E. B. vi. 135. 967. Nym. 543.

Native. Agrestal. Cornfields, principally on gravelly or sandy soil.

Local. A. June-Dec.

First record, *Sib.* 1794. *Antirrhinum spurium, L.*

2. **Ouse.** Hardwick! Ardley, *H. E. Garnsey.*

3. **Swere.** Cornfield just above Broughton Fulling Mill, rare, *T. Bees.*, 1841. Near Worton Wood, *A. Fr.*

4. **Ray.** Beckley! *H. E. Garnsey.* Headington Wick Copse! *Bz.* Stow Wood, *Hb. Lawson.* Elsfield! *H. Bos.* Oddington, Tackley, Marston.

5. **Isis.** South Leigh, *Sib.* Charlbury, *J. M. Albright.* Hailey, *F. Westell.*

6. **Thame.** Cowley, *Sib.* Between St. Clement's and Cowley, between Bullingdon Green and Shotover! cornfield adjoining Long Meadow, *Bz.* Bullingdon, *H. Bos.* Headington, Dorchester, var. *peloria*, *Rev. F. Bennett!*

7. **Thames.** Goring, Nettlebed, Bix, Ilvingden Farm, above Wallingford, Mongewell, var. *peloria.*

Berks. South Hinksey.

L. Elatine, Mill.

Top. Bot. 296. Syme, E. B. vi. 134. 956. Nym. 542.

Native. Agrestal. Cornfields. Local. A. June-Dec.

First record, *Sib.* 1794. *Antirrhinum Elatine, L.*

2. **Ouse.** Ardley, *H. E. Garnsey.* Hardwick.

4. **Ray.** Near Headington Wick Copse, *Bz.*! Elsfield, *H. Bos.* Beckley.

5. **Isis.** South Leigh, *Sib.* Witney, *H. Bos.*

6. Thame. Headington, *Sib.* Between St. Clement's and Cowley Marsh, between Bullingdon and Shotover, *Bx.* Shotover, *R. Linton.* Between London Road and Long Meadow, *Bx.* Bullingdon, *H. Bos.*

7. Thames. Goring, Ilvingden Farm.

Berks. Hinksey Hills, *Bx.*

* *L. Cymbalaria*, *Mill.* *Ivy-leaved Toad-flax.* *Oxford Weed.*

Comp. Cyb. 541. Syme, E. B. vi. 133. 955. Nym. 956. *Bx.* 23.

Denizen. Old walls. Common about Oxford and along the Thames Valley. P. April-Nov. Occurs in all the districts. 'From Oxford to Teddington we are continually meeting with the flowery festoons of this pretty plant wherever old stone-work is found in proximity to the water.' *Hall's Book of the Thames*, 133.

This is the plant whose structure and relations Linnæus, during the interview he had with Dillenius in the Botanic Garden, explained in so clear a manner as to remove the prejudice against him and to constrain Dillenius to admit that he was not the man to bring Botany into confusion. See *Daubeny's Guide to the Gardens.*

First record, *Sib.* 1794. *Antirrhinum Cymbalaria*, L.

VERONICA. L.

V. officinalis, L. *Speedwell.*

Top. Bot. 289. Syme, E. B. vi. 163. 984. Nym. 545.

Native. Ericetal, sylvestral. Banks, heaths, dry pastures, woods, etc.

Local. Not uncommon. P. May-Aug.

First record, *Sib.* 1794.

1. Stour. Tadmorton Heath, *T. Bees.* !

3. Swere. Hanwell, Wroxton, *T. Bees.* Crouch Lane, *A. Fr.* Epwell Heath.

4. Ray. Stow Wood! Headingdon Wick Copse! *Bx.*

5. Isis. Chipping Norton, *Gull.* Ditchley Wood! *O. V. Aplin.* North Leigh, *Rev. F. Bennett.* Finstock Heath, Wychwood, Rameden Heath, Mill Wood.

6. Thame. Shotover! Bullingdon, *Sib.* Sydenham, *Hb. Bx.* Culham.

7. Thames. Binfield, Chinnor, Sunley Wood, Fawler, Ipsden, Chanse Heath.

Berks. Wootton Heath, *Hb. Dill.* Bagley, Wytham, Eng Wood, Boar's Hill, Frilford.

V. Chamaedrys, L. *Germander Speedwell.*

Top. Bot. 290. Syme, E. B. vi. 164. 986. Nym. 546. *Bx.* 50.

Native. Septal. Hedgebanks, waysides, etc. Abundant and widely distributed. P. May-July.

First record, *Sib.* 1794.

With pale lilac flowers larger than usual on Shotover. Light pink flowered forms have also been noticed.

V. montana, L. *Mountain Speedwell.*

Top. Bot. 289. Syme, E. B. vi. 166. 987. Nym. 546.

Native. Sylvestral. Shady woods. Local, not common. P. April-July.

First record, Blackstone, 1737, *V. Chamædryoides foliis oblongis pediculis insidentibus*, R.

5. Isis. In a wood between Handborough and Freeland! *Bz.* Wychwood! *H. Bos.*

6. Thame. Shotover Plantations! *Sib.*, do., 1884.

7. Thames. Stokenchurch Woods! *Hb. Banks.* Nettlebed! *Sib.* Lambridge Wood! *Bolton King.* Mongewell, College Wood, Withy Coppice, Vernal's Wood, Maple Durham, Sunley Wood, Queen's Wood, Ipsden Heath.

Berks. Cumnor, *H. Bos.* Bagley, *Bz.* / Streatley, Unwell Wood. Bucks. Northants requires verification. Gloster. Warwick.

V. scutellata, L. *Marsh Speedwell.*

Top. Bot. 288. Syme, E. B. vi. 167. 988. Nym. 546.

Native. Uliginal. Peat bogs, wet places on heaths. Rare. P. June-Aug.

First record, *Sib.* 1794.

4. Bay. Otmoor, *Sib.* / A small prostrate form with fleshy leaves is still plentiful in the marshy meadows about Oddington, etc.

5. Isis. Port Meadow, *Bz.* Near Long Handborough, Ramsden Heath, Binsey Common.

6. Thame. Bullingdon Green, *Sib.* Between Cowley and Henley Road, *Bz.*

7. Thames. Ibstone Common, *Bz.* Woodcote Common, Binfield dwarf form with pure white flowers.

Berks. Bagley Wood, *Bz.* Kintbury, Virginia Water, *Brit.*

V. Anagallis, L.

Top. Bot. 288. Syme, E. B. vi. 168. 989. Nym. 547.

Native. Paludal. Ditches, brooks, ponds. Not uncommon and widely distributed. P. June-Aug.

First record, 1794.

2. Ouse. Hardwick, Hethe, etc.

3. Swere. Banbury, *A. Fr.* Abundant in Cherwell Valley.

4. Bay. Near Bicester, *A. Fr.* Marston to Wood Eaton. Common about Bicester, Islip, Otmoor, Heyford, etc.

5. Isis. Charlbury, *T. Westcombe*. Binsey, *H. Bos*. Cornbury Park, South Leigh, Port Meadow, Eynsham, Radcot.
6. Thame. Nuneham, *H. Bos*. Cowley! *Newb*. Albury, etc.
7. Thames. Caversham, South Stoke, etc.

V. Beccabunga, L. *Brooklime.*

Top. Bot. 289. Syme, E. B. vi. 169. 990. Nym. 546.

Native. Paludal. Ditches, ponds, and wet places. Abundant in all the districts. P. May-Aug.

First record, *J. Bobart* in *Ray*, 1696, *V. aquatica rotundifolia Beccabunga dicta minor*, with white flowers by the side of Headington Hill near Oxford. Bobart describes *Samolus* under two names in Morison, one being sometimes referred to this plant in error. See *Ray-Dillenius*, 1724, p. 283. The pink flowered plant is *V. limosa*, Lej.

V. serpyllifolia, L. *Smooth Speedwell.* *Paul's Betony.*

Top. Bot. 288. Syme, E. B. vi. 157. 978. Nym. 547.

Native. Wet pastures, cultivated ground. Common. P. May-July. Occurs in all the districts.

First record, *Sib.* 1794.

V. arvensis, L. *Wall Speedwell.*

Top. Bot. 288. Syme, E. B. vi. 155. 976. Nym. 547.

Native. Glareal, agrestal. Wall-tops, cultivated ground, waysides, particularly on sandy soil. Common. A. May-July. Occurs in all the districts.

First record, *Plot*, 1677, with white flowers. A white flowered form has been noticed at Chinnor, Stow Wood, etc.

V. agrestis, L. *Green Speedwell.*

Top. Bot. 290. Syme, E. B. vi. 151. 972. Nym. 548.

Native. Agrestal. Cultivated ground, waste places. Common and generally distributed. A. Feb.-Oct.

First record, *Sib.* 1794.

Flowers wholly white between St. Clement's and Iffley and near Littlemore, 1824, *Bz.* *Agrestis* often occurs with *arvensis* on wall-tops.

V. polita, Fr. *Grey Speedwell.*

Top. Bot. 290. Syme, E. B. vi. 150. 971. Nym. 548.

Native. Agrestal. Cultivated ground. Common. A. Jan.-Dec.

First notice, unlocalised, *Walker's Flora*, 1834. First localised record, *Rev. W. Neubould*, 1861, Oxford.

Var. *grandiflora*, Bab.

With the preceding, as at Headington, Elsfield, Marston, Tackley, Littlemore, etc.

V. persica, Poir.

V. Buxbaumii, Sen. Top. Bot. 291. Syme, E. B. vi. 152. 973. Nym. 548.

Denizen. Agrestal. Cultivated fields. Common and generally distributed. A. Feb.-Dec.

First record, *W. Baxter*, 1841, sub nom. 'polita.'

2. Ouse. Mixbury, Ardley.

3. Swere. Constitution Hill, 1850, *T. Bees*. Banbury, *A. Fr.* Adderbury, *Newb.* 1857.

4. Ray. Summertown, *R. Linton*. Beckley, Wood Eaton, Bicester, etc.

5. Isis. Witney, *H. Bos*. Minster Lovell, Charlbury, Woodstock.

6. Thame. Cornfield on the London Road near first milestone, 1841; between Oxford and Ifley, 1845; between Rose Hill and Long Meadow, 1847; between St. Clement's and Cowley, 1848, *Bz.* Shotover, etc.

7. Thames. Caversham, *Newb.*, 1861. Aston Rowant, 'polita,' *Hb. Bz.* Abundant about Goring, *W. Pamplin*, *Phyt.* v. 153.

Berks. Hinksey, Cumnor, etc.

V. hederæfolia, L. *Ivy-leaved Speedwell.*

Top. Bot. 290. Syme, E. B. vi. 149. 970. Nym. 549.

Native. Agrestal. Waste and cultivated ground, especially light sandy fields and garden ground. Locally abundant and a pest. It is found in all the districts. A. April-July.

First record, *Sib.* 1794.

LIMOSELLA. L.

L. aquatica, L. *Mudwort.*

Top. Bot. 298. Syme, E. B. vi. 146. 968. Nym. 549. Bz. 212.

Native. Inundatal. Muddy places where water has stood. A. July-Sept. Very rare or extinct.

First record, *Sir Joseph Banks*, 1760.

4. Ray. Noke, *Sib.*

5. Isis. Port Meadow opposite Lower Wolvercote, Towing-path side, Medley Lock, *Bz.* 1820. Port Meadow, *Hb. Bz.* 1820. Do. in *Purton*, ii. 366. Near Oxford, *Hb. Banks*. Binsey Common, *Sib.*

6. Thame. Cowley Marsh near Cowley Road, *Bz.*

Berks (?). Northants, probably extinct, not an error. Gloster W. (?). Warwick, rare.

ODONTITES. Hall.

O. rubra, P. *Red Eyebright.*

Top. Bot. 292. Syme, E. B. vi. 174. 993. Nym. 550. Bz. 223. *Bartsia odontites*, Huds.

Native. Pascual. Cultivated fields, waysides. Common. A. June-Aug.

First record, Cow-wheat with white flowers, Oxford, *Mr. Martin* in *How's Phytologia*, 1650, or *Sib.* 1794.

Var. *O. serotina*, Rehb., spec. Nyman.

Moist meadows, waysides. Rather common and often with white flowers.

3. **Swere.** Shutford, Swalecliffe.

4. **Ray.** Beckley, Marston.

5. **Isis.** Bruern, North Leigh, and var. *alb.* Woodstock Road.

6. **Thame.** Wheatley, Tetsworth, Horsepath.

7. **Thames.** Nuffield.

Var. *O. verna*, Rehb. Fl. Ex. 359.

Cultivated fields. Not uncommon, but the localities have not been specially noted.

1. **Stour.** Sibford.

6. **Thame.** Bullingdon.

EUPHEASIA. L.

E. officinalis, (L.) Schk. *Eyebright.*

Top. Bot. 292. Syme, E. B. vi. 171. 992. Nym. 551. Bx. 72.

Native. Ericetal. Pastures, heaths, roadsides, etc. Local. A. May-Sept.

First record, *Sib.* 1794.

1. **Stour.** Tadmarton, *A. Fr.* /

2. **Ouse.** Mixbury.

3. **Swere.** Bretch, Crouch Lane, between Bloxham Grove and Adderbury West, *T. Bees.*

4. **Ray.** Beckley, Kirtlington, Stow Wood.

5. **Isis.** Wychwood, *Rev. R. Linton.* With *Uredo Rhinanthacearum*, about Oxford, *Bx.* North Leigh, Stonesfield, Finstock Heath, Port Meadow.

6. **Thame.** Shotover, Wheatley, Bullingdon.

7. **Thames.** Crowell Hill, Binfield, Grimes' Dyke, Nettlebed, Beacon Hill.

Berks. Cumnor, Tubney, Bagley, Boar's Hill.

Var. *gracilis*, Fr., spec. Nyman. Syme, E. B. vi. 171. 992.

6. **Thame.** Wheatley, see *Rep. of Rec. Club*, 1882.

7. **Thames.** Ipsden, Nettlebed, Goring, see *Rep. of Rec. Club*, 1883.

RHINANTHUS. L.

R. Crista-galli, L. *Yellow Rattle.*

Var. *minor*, Ehrh., spec. Nyman.

Top. Bot. 293. Syme, E. B. vi. 180. 998. Nym. 552. Bx. 259.
 Native. Pratal. Meadows and pastures. Abundant. A. May-July.
 First record, *Morison* (Bobart), iii. 426, *Pedicularis pratensis lutea*
vel Crista galli, C.P.B. 'nihil frequentius nihil inutius,' 1699.
 With *Uredo Rhinanthacearum* about Oxford. It is frequent in the
 Parks.

PEDICULARIS. L.

P. palustris, L. Marsh Lousewort.

Top. Bot. 293. Syme, E. B. vi. 178. 996. Nym. 553.
 Native. Paludal. Peat bogs, marshes. Local, rather rare. A. May-
 Sept.

First record, *Blackstone*, 1737. *P. palustris rubra elatior*, Raii.

3. *Swere*. Broughton, *Gull*. Wroxton, *T. Brayne*.

4. *Ray*. Abundant in Weston Peat Pits, *W. Wilson Saunders*. Near
 Upper Heyford! Headington Wick Copse! Bx. Behind Headington
 Hill, *Sib*. Near Stow Wood, marsh between Kirtlington and
 Tackley, Marston.

5. *Isis*. South Leigh Meadows, *Sib*. Charlbury, *T. Westcombe*.
 Boggy places between Wolvercote and Yarnton near the canal, Bx.
 Wolvercote! Cornbury! *H. Bos*. In Ascot Field sparingly, *Black-*
stone. With white flowers near Grafton Common.

6. *Thame*. Bullingdon! *Sib*., *Hb. Lawson*. Shillingford, *Rev. F.*
Bennett. Garsington, *H. Bos*. Shotover.

7. *Thames*. Riverside near Moulsoford.

Berks. Bagley, Bx. Near South Hinksey, Tubney.

P. sylvatica, L. Heath Lousewort.

Top. Bot. 293. Syme, E. B. vi. 179. 997. Nym. 554. Bx. 266.

Native. Ericetal. Heaths, dry pastures, and grassy places in woods.
 Local, but not uncommon. A. April-July.

First record, *Sib*. 1794.

1. *Stour*. Tadmarton Heath! *A. Fr*.

3. *Swere*. Hanwell Furze Ground, *Gull*. Do. var. *alba*, *O. V. Aplin*.
 Sitter's Mill, *T. Brayne*.

4. *Ray*. Headington Wick, *H. Bos*.

5. *Isis*. South Leigh Heath, *Sib*. North Leigh, Wychwood, and var.
alba, Ramsden Heath.

6. *Thame*. Shotover! *Sib*. Cowley, *Hb. Bx*. Open Magdalen, *H. E.*
Garnsey.

7. *Thames*. Penley, *Hb. Bx*. Mongewell and var. *alba*, Binfield and
 var. *alba*.

MELAMPYRUM. L.

M. pratense, L. Cow Wheat.

Top. Bot. 293. Syme, E. B. vi. 182. 1002. Nym. 556.

Native. Sylvestral. Woods and bushy places. Local, not common.

A. May-Aug.

First record, *Sib.* 1794.

4. Ray. Stow Wood, *Sib.*! Headington Wick Copse! *Bz.* Near Heyford, *Rev. E. Fox.*

5. Isis. Tar Wood, *Sib.* Between Stonesfield and Woodstock, 1831, Woods about Church Handborough, *Bz.* Mill Wood.

6. Thame. Shotover, *Sib.*

7. Thames. Wood between 'Flowing Spring and Shiplake,' *A. Fr.* Kidmore End, *F. Tufnail.* College Wood, Whitchurch near Nuffield.

Berks. Birch Copse, *T. Thurland.* Bagley, *Bz.* Maidenhead, Wargrave, *Brit.*

Var. *M. latifolium*, Syme. Syme, *E. B.* vi. 185. 1004. Hook. St. Fl. Chalk dist. Oxon, etc. Comp. Cyb. 541.

6. Thame. Ridge of hill between Goring and Whitechurch, *Prof. Babington* in Syme, *E. B.* vi. 185. Withy Coppice, Wood near Cane End, Wood near Park Farm. The corolla when fully expanded has the mouth partially open.

[*M. cristatum*, *L.* 'Extinct,' *Dr. M. T. Masters, Phyt.*, n. s. ii. 113. I can find no trace of its having been recorded.]

Bucks, old record. Northants, Wakerley Wood.

** *Mimulus luteus*, *L.* Waterfall, Wroxtton, *A. Fr. list.* Not wild.

ORD. LIV. OROBANCHEÆ, *Rich.*

OROBANCHE. *L.*

O. elatior, *Sutt.*

O. major, *L. suec.* Top. Bot. 299. Syme, *E. B.* vi. 196. 1013. *Nym.* 560.

Native. Parasitic on *Centaurea Scabiosa*. Rare. July, Aug.

First record, *Sib.* 1794. *O. major*, *L.*

3. Swere. Between Milton and Barford, *A. Fr.* 'major,' *elatior* certainly!

4. Ray. Near the Parks, *Sib.* Summertown, *H. Bos.* Near Bletchington, *Wm. Davenport.* Field between Barton and Sandhill, *R. Walker.*

5. Isis. Stanton Harcourt, *Sib.* Near Roman pavement, North Leigh, *J. M. Albright.* Fields near the road between Oxford and Woodstock, left-hand, near the half-mile-trees, one spike two feet six inches high, with sixty-five flowers, *Bz.* in *Purton.*

7. Thames. Henley, *Sib.* Fields near South Stoke, with *O. minor*, 1884.

Berks. Woodhay, Kintbury, Elcot, *Brit.* Near Cumnor. Northants, Gloster (?), Warwick rare.

O. minor, Sutt.

Top. Bot. 300. Syme, E. B. vi. 199. 1016. Nym. 562. Bx. 381.

Native. Parasitic on clover, etc. Local. Common on lower chalk.

A. June-Oct.

First record, *Dr. Lloyd, Bishop of Oxford*, about 1820.

1. Stour. Between Hooknorton and Little Sibford, half mile from latter, 1863, *T. Bees*.
3. Swere. Between Milton and Barford, *A. Fr.*
4. Ray. Between Bicester and Middleton Stoney, near Cross Roads, *A. Fr.* Above Headington Wick Copse, *R. Walk*.
5. Isis. Yarnton, *T. Thurland*. Handborough.
6. Thame. Near Warnford Asylum, *Bx.* Headington! *H. Bos.* Littlemore railside.
7. Thames. Ewelme, *Dr. Lloyd*. Bix, *Dr. Williams*. Caversham, *Irvine*. Goring, *Newb.* Watlington, *H. Bos.* South Stoke, very abundant in cloverfields, see *Rep. of Rec. Club*, 1880. Watlington. In *Picris*, yellow-flowered form very different in appearance from ordinary *minor*, but not *Picridis*, Sz. Mongewell, Cookley Green, etc.

Berks. Hinksey Hill, *H. Bos.* Frilford, Moulsoford, etc. Bucks, Gloster, Warwick.

[*O. rapum, Th.* Snelsmore Common, Hampstead Norris, *Brit.* Berks, Bucks, Northants, Gloster E.]

LATHRAEA. L.

L. squamaria, L. Toothwort.

Top. Bot. 301. Syme, E. B. vi. 189. 1006. Nym. 562. Bx. 365.

Native. Sylvestral. Parasitic on roots of hazel, etc. Local and rare.

A. April, May.

First record, *Dr. Lightfoot*, about 1740.

3. Swere. Swerford, *Wm. Colegrove*.
5. Isis. Woodstock Park Woods, near Ashford Mill, *Sib.* Sarsgrove Wood, *Hb. Bx.* In a Copse near North Leigh, *Dr. Lightfoot*, *MSS.* Wychwood, *H. Bos.* Copse near Charlbury Station, *J. W. Albright*. Blenheim Park! *Bolton King*. By bridge side, Bladon, under elm trees near Rookery, Blenheim, *F. Rogers*. Asthalleigh, *F. Westell*. Cornbury Quarries under blackthorn bushes, 1884.

Berks. Cumnor, Kintbury.

In the Student's Flora *Lathraea* is placed in *Scrophulariaceæ*.

ORD. LV. VERBENACEÆ, *Juss.***VERBENA. L.****V. officinalis, L.** *Vervain.*

Top. Bot. 302. Syme, E. B. vi. 202. 1017. Nym. 563. Bx. 26.

Native. Viatical. Dry gravelly waysides. Local. P. July–Oct.

First record, *Sib.* 1794.

2. **Ouse.** Mixbury, *R. C. Pryor.*

3. **Swere.** Shutford, Hooknorton, *Gull.* Souldern, Cropredy, Twyford Lane, *T. Brayne.* Broughton, between Adderbury and Milton, below Constitution Hill, Banbury, *A. Fr.*

4. **Ray.** Noke, Wood Eaton, *R. Linton.* Between Holywell and the Park, *Bx.*, extinct. Elsfield, Rousham.

5. **Isis.** Hailey, Eynsham, *H. Bos.* Near Woodstock, *F. Rogers.* Minster Lovell.

6. **Thame.** Cowley Marsh, Bullingdon Green, *Bx.* Dorchester and Burcote.

7. **Thames.** Henley, *H. Bos.* Goring! *Newb.* Ipsden.

Berks. Abingdon.

* * **V. paniculata, Lam.**

Alien. On mud thrown out of Canal near Grimsbury Wharf, 1867.

A. French.

ORD. LVI. LABIATÆ, *Juss.***TEUCRUM. L.****T. Scrodonia, L.** *Wood-sage.*

Top. Bot. 311. Syme, E. B. vii. 85. 1093. Nym. 565. Bx. 22.

Native. Sylvestral, etc. Dry woods and heathy places. Local.

Rather rare. P. June–Aug.

First record, *Sib.* 1794.

4. **Ray.** Upper Heyford, *Rev. E. Fox.* Stow Wood, *Sib.*

5. **Isis.** Wychwood, Woodstock, Ditchley, *H. Bos.*

6. **Thame.** Shotover, *Sib.* 1885. Do. on south side, near old ochre-pits.

7. **Thames.** Stokenchurch, Goring, *H. Bos.* Withy Coppice.

Berks. Bagley, Cumnor, Appleton, Streatley, Boar's Hill. Bucks, Northants very rare, Gloster, Warwick.

Given without localities in Walker.

T. Scordium. L. *Water Germander.*

Top. Bot. 311. Syme, E. B. vii. 83. 1092. Nym. 565.

Native. Paludal. Wet places and streamsides in marshy districts.

Most rare, if not extinct. P. Aug.

First record, *W. Turner*. Groweth in Oxford and Cambridge in good plenty, 1568.

5. *Isis*. 'Groweth near to Oxenford, by Rewly, on both sides of water,' *Gerarde*, 1597. Near Aristotle's well at Oxford, *Merrett*, 1666. 'Upon Botley Causey, presently after you are over the stream that goeth to Osney Mill, not over far from Rewly, which is the place Mr. Gerard mentions, but on the other side of the water,' *Wm. Coles*, 1657. Coles took plants from here to the School-house garden, Adderbury. Banks of *Isis* near High bridge; Eynsham Common, *Sib.*, *Phyt.* 1856, *extinct*. Godstow, very rare, 1864, *H. Bos.* in *Hb. Br. Mus.*, *Hb. Lawson*, do. *H. Bos.*, 1868.
6. *Thame*. In a meadow by Abingdon called Nietford, *Mr. R. Slater*, in *Gerarde*, 1597.

This last record may be in Berks. Northants, extinct.

* *T. Chamædrys*, *L.* *Germander*.

Comp. Cyb. 564. Syme, E. B. vii. 84. 1094. Nym. 565.

Denizen. Old walls. Very rare. P. June, July.

First record, *Dr. Lightfoot*, about 1760. And perhaps first as British.

5. *Isis*. Witney, on right hand side of old road leading to Burford, *Dr. Lightfoot*, *MSS.*, also in *Sib.* and *Auct. var.*; see *Rep. of Rec. Club*, 1880, p. 163. It also occurred on bank at the base of the wall.

AJUGA. *L.*

A. reptans*, *L. *Bugle*.

Top. Bot. 312. Syme, E. B. vii. 77. 1088. Nym. 567. Bx. 94.

Native. Sylvestral, etc. Woods, pastures, etc. Common and generally distributed. Abundant in many of the Chiltern woods. The flesh-coloured form was thought at one time to be another species. *Bobart*, see *Ray Stirp.* 1690, records it as *Bugula cærulea alpina*, Park. Stokenchurch woods, but *Bobart* himself in *Morison*, vol. iii. 391, 1699, gives it as *Bugula media flore carneo media pratensis purpurea*, C. B. P. 'In agro Oxoniensis in sylva haud longe a villa Stokenchurch dicta nos comitibus usi D. Davis, M.D. et D. Branker, A.M. in plantarum inquisitione versati triginta abhinc annis, hanc Bugulam sponte nascentem reperimus cujus exemplaria in horto sicco conservamus, sed scrutinio accuratissimus usi pluribus exinde annis, denuo invenire nos potuimus.' In Wychwood, *Blackstone*, 1737, described it as growing sparingly. It was still there in 1885, and white varieties have been noticed there and at Mongewell, Blenheim, Shotover, and pale blue at Ipsden and Wychwood. P. May-July.

On faith of the Ray record Oxfordshire has been occasionally stated

to yield *Ajuga alpina*; a gross error, almost too palpable to require contradiction.

[*A. chamæpitys*, Sch. Northants, extinct (?).]

SALVIA. L.

S. pratensis, L.

Top. Bot. 303. Syme, E. B. vii. 45. 1058. Nym. 569. Bx. 65.

Native. Glareal and pascual. Grassy fields and roadsides on the Great Oolite. Local and rare. P. June-Aug.

First record, *Dillenius* and *Bobart*, 1730.

4. Ray. Roadside between Middleton and Ardley, *Sib.* In the green lane leading from Kirtlington to the western extremity of Lord Jersey's Park at Middleton (this lane is probably the Wattlebank), near Bicester, *Dr. Brain*, (?) *Brayne*. *W. Wilson Saunders' Kirtlington list*.
5. *Isis*. 'Found by me in company with Dr. Dillenius, 1730, over y^e hill by Comb Mill in y^e path-way leading from North Leigh to y^e Mill,' *Bobart* in *Hb. Dill.* Glyme Farm, *T. Beesley*. Finstock, Little Park near Cornbury! plentifully, *A. Fr.*, *Hb. Br. Mus.* About Enstone and Spelsbury, *Rev. T. Sibley*, 1832, in *Bx.* Field near Charlbury, *Miss Gillett* in *Young England*, 1864. Wychwood, *Hb. R. Linton*. Half-a-mile east of Charlbury Station near a bridge leading into the Park, *Rev. E. F. Linton*. In a meadow above the Head Keeper's Lodge, Cornbury, also along the edge of the wood above the ponds, and in the lane leading thence to Stonesfield, *Rev. H. E. Fox*, 1872, see *Rep. of Ex. Club*, 1872. Field near Manor House, Finstock, *J. M. Albright*. Bank side of wood descending to Ashford Mill, and on right under hedge of field bounding wood, *MS. note in Dr. Williams' copy of New Bot. Guide*. Freeland Field near Church! *Mrs. Taunton*, 1882. Finstock near Wychwood. Furzy brake near Holy Court, 1885. This latter is probably Dillenius' locality. Oxford as a habitat for *Salvia pratensis* is referred to in all the Botanical Manuals and Guides. French, in *Journ. Bot.* 1875, vol. xiii. p. 293, showed clearly its claims to be considered a native plant. In Oxford it is found in old grass-fields, as it is on the continent; at one time it probably extended over the oolitic tract of the county. It has been noticed with white flowers at Ardley.

Berks. Near Blewbury, see *Brit.* (?) **Bucks**, near Hambledon. **Northants**, error. **Warwick**.

S. verbenaca, L. *Clary*.

Top. Bot. 303. Syme, E. B. vii. 42. 1056. Nym. 570.

Native. Viatical. Dry banks by roadsides. Local. P. May-Oct.

First record, *Sib.* 1794.

4. **Ray.** Near the Parks, *Bx.*, extinct.

5. **Isis.** Long Handborough, *J. French* / Godstow, Eynsham, *H. Bos.*
Church Handborough, Charlbury, Burford.

6. **Thame.** Between Iffley and St. Clement's, *R. Walk.* Wheatley!
W. Whitwell. Great Haseley, Great Milton.

7. **Thames.** Whitchurch, *A. Fr.* Near Wallingford, Goring, Caversham, Hardwick House.

Berks. Near Abingdon, Marcham.

SCUTELLARIA. L.

S. galericulata, L. *Skull-cap.*

Top. Bot. 321. Syme, E. B. vii. 47. 1060. Nym. 572. Bx. 12.

Native. Paludal. By rivers, canals, and streams. It probably occurs in all the districts although not on record for the Stour. It is frequent by the Thames, Cherwell, etc., and occurs with white flowers near Wolvercote, Osney, etc. P. July–Sept.

First record, *Sib.* 1794.

S. minor, L.

Syme, E. B. vii. 48. 1061. Nym. 573.

Native. Ericetal. Damp, heathy ground. Very rare. P. June–Sept.

First record, *the Author*, see *Rep. of Rec. Club*, 1882.

7. **Thames.** Damp ground on Binfield Heath with *Pedicularis sylvatica*, on London Clay.

Berks. Cholsey, 1835, Virginia Water with a hybrid. **Bucks.**
Warwick.

PRUNELLA. L.

P. vulgaris, L. *Self-heal.*

Top. Bot. 321. Syme, E. B. vii. 46. 1059. Nym. 573. Bx. 67.

Native. Pascual. Pastures, heaths, etc. Common. P. July, Aug.

First record, *Sib.* 1794.

On Shotover with *Asteroma Prunella*, *Purt.*, *Bx.* With white flowers at Headington Wick, *H. Bos.*, and in Wychwood. It occurs plentifully in the turf of Magdalen College Grounds. The flowers are also occasionally pale blue, and sometimes rich purplish violet.

LAMIUM. L.

L. album, L. *White Dead Nettle.*

Top. Bot. 314. Syme, E. B. vii. 75. 1086. Nym. 575. Bx. 31.

Native. Viatical. Roadsides, waste places, fields, borders, hedgebanks. Locally abundant in all the districts, yet absent from considerable

portions of the county. Occurs in and about Oxford, as by the Railway Station, Holywell, back of Wadham College, etc. P. May-Sept.

First record, *Sib.* 1794. Flowers tinged with pink near Goring. Humble bees are particularly fond of the flowers of this species.

* *L. maculatum*, L.

Comp. Cyb. 546. Syme, E. B. vii. 94. 1085. Nym. 574.

Alien. Plantations and waste places. Established in a few places.

P. April-Aug.

1. *Stour*. Plantation adjacent to the garden of the Hermitage, Tadmarton Heath, *A. Fr.*

3. *Swere*. Hedgebank at corner, close to lime-kiln, Tadmarton, *T. Bees*.

4. *Ray*. Islet in Cherwell, but no doubt originally from Botanic Garden, *Dyer* in *Journ. Bot.* ix. 147. Var. *L. lævigatum*.

Still there in 1884. First found by *W. Baxter* in hedge-bank in Long Meadow, between Oxford and Iffley, 1815, and recorded as *L. rugosum Ait.*, and on the side of the wall round Christ Church Meadow. This has undoubtedly escaped from the Physic Garden, where it has become a weed, and where it was first cultivated in 1766. It has established itself in the little island between Christ Church Walk and Long Meadow, and is now, April 23, 1851, in full flower, covering the greater part of the island, *Bx. MSS.* See also *Walk. Fl., Appendix*.

L. purpureum, L. *Red Dead Nettle*.

Top. Bot. 314. Syme, E. B. vii. 72. 1073. Nym. 575.

Native. Agrestal. Cultivated and waste ground. Common as a garden and allotment weed, occurring plentifully in all the districts. A. Feb.-Dec.

First record, *Plot*, with white flowers, 1677. Also with white flowers about Crouch and Wickham, *T. Bees.*, and near Charlbury.

Var. *L. decipiens*, Sond.

3. *Swere*. Roadside near Adderbury, *A. Fr.*

4. *Ray*. Between Banbury Road and Water Eaton, *Rev. E. F. Linton*.

5. *Isis*. Long Handborough.

6. *Thame*. Littlemore.

7. *Thames*. Goring.

L. hybridum, Vill.

L. dissectum, With. *L. incisum*, W.

Top. Bot. 315. Syme, E. B. vii. 72. 1073. Nym. 575.

Native. Agrestal. Cultivated ground, roadsides. Local and rather rare. A. April-Aug.

First record, *J. Oglander* in *Walk. Fl.* 1834.

4. Ray. Wood Eaton on wall-top.
 5. Isis. Shipton-on-Wychwood.
 6. Thame. Cornfields beyond Cowley, *L. incisum*, Bz. His specimen from Thame is *L. purpureum*, var.
 7. Thames. Mongewell, *Bolton King*.
- Berks. Medmenham, *Brit.* Northants, very rare. Warwick, rare.
 [L. intermedium, Fr., is given in the Flora of Warwick as native in an allotment near Dunchurch: can this be correct?]

L. amplexicaule, L. Henbit.

- Top. Bot. 314. Syme, E. B. vii. 69. 1081. Nym. 575.
 Native. Agrestal, etc. Cultivated ground, wall-tops, etc. Locally common. A. April-Aug.
 First record, *Sib.* 1794.
1. Stour. Sibford Ferris, *A. Fr.* Stourwell.
 3. Swere. Milton, *A. Fr.*
 4. Ray. Stow Wood, Kirtlington.
 5. Isis. Freeland, Charlbury.
 6. Thame. Headington, *Dr. Williams!* Shotover! *Hb. Lawson.* Cowley, Thame, *Hb. Bz.*
 7. Thames. Caversham, *Newb.* Stokenchurch.

GALEOBDOLOX. Huds.

G. luteum, Huds. Weasel Snout. Yellow Archangel.

- Top. Bot. 313. Syme, E. B. vii. 76. 1087. Nym. 575. Bx. 194.
 Native. Sylvestral, etc. Woods, wood-borders and hedges. Local. P. April-June. *Lamium Galeobdolon*, Cr.
 First record, *Sib.* 1794, *Galeobdolon Galeopsis*.
2. Ouse. Absent from N.E. of county, *R. C. Pryor.* Ardley Wood, *Miss Griffith!*
 3. Swere. Swerford Wood, *T. Bees.* Horley, *Mr. Jessop.*
 4. Ray. Headington Wick Copse! Stow Wood! *Sib.* Noke Wood, Tackley.
 5. Isis. South Leigh, *Sib.* Stonesfield, Wychwood, Bladon, Ditchley.
 6. Thame. Shotover, on Portland just above Kimmeridge Clay.
 7. Thames. Kingston Hill, *Bz.* Goring, College Wood, Nuffield, Chinnor, Withy Coppice, Aston Wood, Queen's Wood, Penley Wood, Sunley Wood, Vernal's Wood, Ibstone Wood, Dyson's Wood, Cane End, Collin's End, Coomb End, Whitchurch, Ipsden Wood.
- Berks. Bagley, *Wm. Coles*, 1657! Wytham! *H. Bos.* Streatley, etc.
 Very rarely the upper bracts are so much developed as to become leaf-like; it is then *G. luteum*, Reich, the name of *G. montanum* being given by him to our typical plant.

GALEOPSIS. L.

* **G. versicolor**, Curt. *G. speciosa*, Mill.

Top. Bot. 316. Syme, E. B. xvii. 65. 1077. Nym. 576. Bz. 75.
Colonist. Agrestal. Dry sandy fields. Very rare and sporadic, if not
merely a casual. A. July-Sept.

First record, *G. Coles, Esq.* in *Walk.*, 1834.

3. Swere. Towards Edgehill, *T. Bees*. Possibly in Warwickshire.

5. Isis. Near Bladon.

Berks. Near Wittenham, *Rev. F. Bennett!* Bucks. Northants, very
rare. Warwick, Edgehill.

G. Tetrahit, L. *Hemp Nettle*.

Top. Bot. 316. Syme, E. B. vii. 66. 1078. Nym. 566.

Native. Agrestal, septal, etc. Cultivated grounds, hedges, wood-bor-
ders. Rather common and widely distributed. A. July-Sept.

First record, *Sib.* 1794.

1. Stour. Tadmarton, *A. Fr.!*

3. Swere. Wroxton, North Newington, *Gull*. Little Bourton, between
Bloxham Grove and Milton, *A. Fr.!*

4. Ray. Summertown, *H. Bos.*

5. Isis. Binsey! *H. Bos.* Mill Wood, Godstow, Charlbury, etc.

6. Thame. Shotover, Dorchester, Stadhampton, etc.

7. Thames. Goring, Crowsley, Whitchurch.

Berks. Foxcombe Hill, Cumnor, Ferry Hinksey, etc.

Var. *bifida*, Böen. Syme, E. B. vii. 67. 1079.

6. Thame. Dorchester, Shotover.

7. Thames. Near Cane End, Woodcote.

G. Ladanum, L. *Red Hemp Nettle*.

Top. Bot. 316. Syme, E. B. vii. 62. 1074. Nym. 576.

Native. Agrestal. Cornfields, on dry, sandy, chalky, or calcareous soil.
Not uncommon. A. July-Sept.

First record, *Sib.* 1794.

1. Stour. Sibford.

2. Ouse. Mixbury, Hardwick, Shelswell.

3. Swere. North Newington, Broughton, *A. Fr.*

4. Ray. Fields above Headington Wick Cope! *Bz.* Kirtlington,
H. Bos. Elsfield.

5. Isis. Eynsham, Stanton Harcourt, South Leigh, *Sib.* Wychwood,
Rev. R. Linton. Witney, *H. Bos.* Millwood, Charlbury, Ditchley.

6. Thame. Cowley Field, *Bz.* Bullingdon, *H. Bos.*

7. Thames. Stokenchurch, *H. Bos.* Mongewell, Nuffield, Caversham,
and a large flowered form at Chinnor, Goring, Mongewell, Ipsden,
etc.

Berks. Lowbury, Moultsford.

The Oxford plant is *G. angustifolia*, Ehrh., which includes at least two well-marked forms, but neither quite agrees with *G. canescens*, Sch.

BETONICA. L.

B. officinalis, L. *Wood Betony.*

Stachys Betonica, Benth.

Top. Bot. 317. Syme, E. B. vii. 54. 1067. Nym. 577. Bx. 214.

Native. Sylvestral. Woods, hedgebanks, roadsides. Scattered through the country. P. June-Nov.

First record, *Sib.* 1794.

1. Stour. Tadmarton.

3. Swere. Hanwell, North Newington, *T. Bees*. Melcombe, *A. Fr.*

4. Ray. Elsfield, *R. Linton*. Stow Wood, *Sib.* Headington Wick, *H. Bos.* Between Marston and Wood Eaton, Beckley.

5. Isis. South Leigh, *Sib.* Woodstock, *Daubeny*! Woods at Church Handborough, *Bx.* Enslow Bridge, in flower Nov. 7, *T. Bees*. Freeland, North Leigh, Wychwood, Ditchley.

6. Thame. Shotover, *Sib.*! Between Bullingdon Green and Shotover, *Bx.* Horsepath.

7. Thames. Sydenham Hurst, *Bx.* Nettlebed, *A. Fr.* Mongewell, Goring, Binfield with *Pucc. Betonica*, etc.

Berks. Bagley, Eng Wood, Unwell Wood.

STACHYS. L.

S. germanica, L. *Downy Woundwort.*

Top. Bot. 319. Syme, E. B. vii. 56. 1068. Nym. 577, *Oxf.*

Native. Septal, etc. Roadsides, fields. Local. B. July, Aug.

First record, '*Stachys Fuchsii*, Wilde Stinking Horehound. My kinde friend, Mr. Buckner, an apoth. of London, the last yeare being 1632 found [it] wilde in Oxon in the field joyning Witney Parke, a mile from the Towne;' p. 696, *Johnson's Gerarde*.

3. Swere. First march, Banbury, *Gull.*; error, no specimen in Gulliver's herbarium.

4. Ray. Abundant by roadside between Woodstock and Sturdy's Castle, *Purton*, vol. i. 52, *Bx.*, 1831. See also *S. Eng. Bot.* 56! 1885.

5. Isis. Field joining Witney Park, Mr. Buckner in *Johns. Ger.*, also in *How's Phytol.* 1650. Circa Witney, *Ray's Hist. Plant.* 1686. 'In saxosis asperis et arvis restibilibus agri Oxon,' *Morison*, 1649. Also in *Ray's Synopsis*, *Huds. Fl. Ang.*, etc. Witney, Stonesfield, on roadside between Woodstock and Enstone, *Sib.* Between Blenheim and Ditchley, *G. Woodward*. In the cornfields at Brize Norton, *Dr. Goodenough*, in *Bot. Guide*. Chapel House near

Chipping Norton, *Winch. add.* in *New Bot. Guide*. In several parts of Oxfordshire, especially towards Witney, *Sm. Fl. Br.* Lane leading from Wychwood Forest to Charlbury, also in some of the coppices of Wychwood, *Blackstone*, 1737. *Hb. Br. Mus.*, near Witney, *Sir Jos. Banks*, 1766. Between Standlake and Witney, *J. E. Bicheno*. Wychwood, *R. Linton*. Stonesfield, 1866! Dornford Lane, Asthal! By the Glyme near Woodstock, *H. Bos.* Burford, *Hb. Lawson*, old specimen. Road westward of Charlbury Station, *E. F. Linton*. Ducklington, *Bicheno*. [Not in Berks.] Between Minster Lovell and Witney, between Charlbury and Fawler, 1885.

Mr. Watson classes this as an alien or denizen. Had he visited Oxford and seen it growing in natural situations over a wide area he would probably have arrived at a different conclusion. Nyman gives it as a native of Oxon and Beds. 'in Anglia.'

S. sylvatica, L. *Hedge Woundwort.*

Top. Bot. 319. Syme, E. B. vii. 59. 1071. Nym. 578.

Native. Sylvestral. Ditches and hedges, brooksides, etc. Rather common. P. July-Sept. It occurs in all the districts. First record, *Sib.* 1794.

The flowers vary somewhat. A peculiar monstrosity was found by the Rev. F. Bennett near Dorchester, respecting which Dr. Masters writes, 'The sepals, petals, and stamens are normal or nearly so. After their formation, the flower does not seem to have quite made up its mind what to do. The pistil is represented by two leaves inseparate at the base, and from between them starts one (or two) new flower-stalks each bearing a flower similar to the first one. The case therefore is one of median floral proliferation.' See also as to the tendency of this plant to become monstrous in *Reich, Fl. Exc.* i. 319.

S. ambigua, Sm.

Syme, E. B. vii. 58. 1070. Comp. Cyb. 275. Nym. 578.

Native. Septal. Hedgesides, etc. A hybrid of *palustris* with *sylvatica*. Rare. P. July-Sept.

First record, *the Author*; see *Rep. of Rec. Club*, 1881.

5. *Isis*. On the turnpike four miles from Oxford to Woodstock, *F. Westcombe*.

6. *Thame*. Mud Lane, Cowley.

Berks. Holmwood, *Hon. J. Warren*, 1871. Northants, Warwick.
Does Smith's *ambigua* occur in the latter county?

S. palustris, L. *Marsh Woundwort. Clown's Allheal.*

Top. Bot. 318. Syme, E. B. vii. 57. 1069. Nym. 579. Bx. 16.

Native. Paludal. Ditches and streamsides, thickets, and fields. Not uncommon. P. July–Sept.

First record, *Sib.* 1794.

Occurs in all the districts.

Mr. T. Beesley found a hybrid, ? *ambigua*, Sm., in Stayley's Meadow, Banbury, and other hybrids nearer *palustris* than *ambigua* have been noticed near Thame, at Horton, Islip, and Bampton.

***S. arvensis*, L.**

Top. Bot. 319. Syme, E. B. vii. 60. 1072. Nym. 579.

Native. Agrestal. Cultivated fields. Rather rare. A. Mar.–Nov.

First record, *Sideritis alsine Trissaginis folio*, C. B. P.

'In arvis et inter segetes variis circa Oxoniam,' Morison, iii. (*Bobart*), 1699.

3. Swere. In sandy cornfields frequent, *T. Bees.* Milton, *A. Fr.*

4. Ray. The Parks, *Sib.* [extinct]. In cornfields almost everywhere about Oxford, as St. Giles' fields [extinct], *Bx.* Also in Purton.

5. Isis. Stanton Harcourt, South Leigh, *Sib.* Church Handborough, *Bx.* Charlbury! *R. Linton.* Ascott.

6. Thame. Cowley, Iffley, *Bx.* Dorchester.

7. Thames. Goring to Woodcote, Nettlebed.

** *S. annua*, L.

Syme, E. B. vii. 61. 1073. Nym. 579.

Alien. Probably introduced with pheasants' food in Mill Wood, Church Handborough, *F. T. Richards*, 1882!

* *Leonurus Cardiaca*, L. *Motherwort.*

Syme, E. B. vii. 68. 1080. Nym. 580.

Alien. Extinct. Waste places. P. Aug.

'In stony and other barren and rough places, especially about Oxford,' *Gerarde*, 1597.

No other record. Berks one plant near N. Woodhay Common, 1870, *Brit.*

BALLOTA. L.

***B. alba*, L.** *Black Horehound.*

B. fetida, Lam. Top. Bot. 312. Syme, E. B. vii. 52. 1065. *Bx.* 86.

Native. Viatical. Hedgebanks and waste places. Very common. P. June–Sept.

First record, *Sib.* 1794. *B. nigra*, L.

With white flowers at Littlemore, *R. Walk.* On Shotover and near Caversham. The teeth of calyx vary as to length and to fineness, but they never assume, so far as my observation extends, the shape of *B. nigra*. *Ballota* is found by our dustiest roadsides.

B. nigra, L.

B. ruderalis, Sw. Top. Bot. 313. Syme, E. B. vii. 52. 1066.

Native. Waysides. Very rare. A. July-Aug.

First record, *W. W. Newbould*, about 1860.

7. **Thames.** At Goring. One specimen found in Oxon by *Newb.* and *Syme.* *Comp. Cyb. Br.* 547. Also specimens in *Hb. Br. Mus. Coll.*, *Dr. Boswell Syme.*

Hereford, Northumberland only in Top. Bot.

MARRUBIUM. L.* **M. vulgare, L.** *Horehound.*

Top. Bot. 320! Syme, E. B. vii. 51. 1064. Nym. 582. Bx. 171.

Denizen or casual. Viatical. Roadsides and waste places. Very rare.

P. June-Sept.

First record, *Sib.* 1794.

3. **Swere.** On Broughton Road, *T. Bees.*, 1828. Expurge this, *Bees. MSS.*

4. **Ray.** Behind the Parks, *Walk.*, extinct. In several places about Oxford as a garden escape, *Bx.* Rackham's Lane, *T. Thurland.*

5. **Isis.** In Witney Churchyard and at Handborough, *Rev. Dr. Mavor.* Yarnton, *Bx.*

6. **Thame.** Bullington Green, *Sib.*, also *H. Bos.*, 1859, 'scarce.'

Berks. Abingdon Road, *Bx.* About Appleton, *Miss Hoskyns.*

NEPETA. L.**N. Cataria, L.** *Catmint.*

Top. Bot. 319. Syme, E. B. vii. 39. 1054. Nym. 585. Bx. 378.

Native. Septal, etc. Hedges, waysides, and in dry fields on the chalk.

Local, not common. P. July-Sept.

First record, *Blackstone*, 1737, *Cataria major vulg.*

2. **Ouse.** Mixbury, *T. Bees.*

3. **Swere.** Bloxham Road, *T. Bees.* Between Adderbury and Bloxham, *A. Fr.* Wickham, *T. Brayne.*

4. **Ray.** Stow Wood, *Daubeny!* A variegated variety in Stow Wood, *Bx.* Near Bicester, *H. Bos.* Noke, between Kidlington and Shipton.

5. **Isis.** Witney, *Sib.* Banbury Road between sixth and seventh, milestone from Oxford, *Bx.* Dornford Lane, Woodstock, *H. Bos.* By the side of a coppice hedge near the Ranger's Lodge (Wychwood), *Blackstone.*

6. **Thame.** Headington Hill! Shotover! *Sib.* Cheney Lane, *Bx.*; there in 1884. Thame, *Bx.* Cuddesdon, Stanton St. John.

7. **Thames.** Caversham, *Newb.*, also *Hb. Br. Mus.*, *J. Carroll!*

Mongewell, Goring, Ilvingden Farm, with white flowers at Caversham.

Berks. Tubney, *F. Bennett*.

When young and growing in a cornfield near Goring the plant had much the aspect of *Ballota*.

M. Glechoma, *Benth.* *Ground Ivy.*

Glechoma hederacea, L. Top. Bot. 319. Syme, E. B. vii. 40. 1050. Nym. 587. Bx. 136.

Native. Sylvestral, etc. Woods, hedges, banks, etc. Abundant and generally distributed. P. March-June.

First record, *Dillenius*, 1737, *Hedera terrestris flore carneo*. This elegant variety was found by the ingenious and worthy Professor of Botany at Oxford, D. Dillenius, who observed it at Eynsham Abbey in that County, *Blackst. Spec.*, p. 33.

Var. *hirsuta*, R. non W. K.

6. Thame. Headington, *Newb.* Horsepath, *H. E. Garnsey*.

Beer in which Ground Ivy has been steeped is yearly sent into Lincoln College Dining-hall on All Saints' Day.

MELISSA. L.

* **M. officinalis**, L. *Balm.*

Nym. 587.

Denizen or alien. Hedgesides. Rare. P. July, Aug.

5. Isis. Side of a wood near Blenheim Park, between Freeland and Handborough, *Rep. of Rec. Club*, 1881.

CLINOPODIUM. L.

C. vulgare, L. *Wild Basil.*

Calamintha Clinopodium, Sp. *Melissa Clinopodium*, Bth.

Top. Bot. 310. Syme, E. B. vii. 31. 1047. Nym. 588. Bx. 346.

Native. Septal. Hedges, banks, bushy places, wood borders. Rather common and generally distributed. P. July-Sept.

First record, *Wm. Coles*, 1657.

1. Stour. Tadmerton, etc.

2. Ouse. Mixbury, etc.

3. Swere. Drayton Lane, Hornton, *Gull.* Hanwell, Wykham, Bloxham, *A. Fr.*

4. Ray. Beckley, Marston, Elsfield.

5. Isis. Wolvercote, *Rev. F. Bennett*. Handborough, South Leigh.

6. Thame. Foot of Shotover, *Wm. Coles* in *Adam in Eden*. Wheatley, Cuddesdon.

7. Thames. Stokenchurch, *Hb. Bx.* Penley Wood, Nettlebed, Grime's Dyke, Crowsley, etc., abundant.

Berks. Longworth, Cumnor.

CALAMINTHA. *Mch.***C. menthaefolia**, *Host.* *Calamint.**C. officinalis*, *M.*

Top. Bot. 310. Syme, E. B. vii. 34. 1050. Nym. 588.

Native. Viatical. Roadsides and hedgebanks. Rare. P. July-Oct.

First record, *Sib.* *Melissa Calamintha*, *L.*2. *Ouse.* Mixbury, *R. Pryor.*3. *Swere.* Bloxham Road, in the lane leading from Broughton Toll-gate to the Castle, rare, *T. Bees!* Hardwick Road, *Reuben French.*4. *Ray.* Beyond Stow Wood.5. *Isis.* Eynsham, *Sib.* Between Stonesfield and Ashford Mills, *Bz.* Near the Observatory, *Sib.*6. *Thame.* Near Bullingdon, *H. Bos.*7. *Thames.* Caversham, *Hb. Br. Mus., J. Carroll*, 1849. Between Goring and Whitchurch; above Goring.*Berks.* Cumnor, *H. Bos.* Kingston Bagpuze.*Var. Briggsii*, Syme. Merges gradually into the type; it has been noticed at Broughton, etc.**C. Nepeta**, *Sav.* *Lesser Calamint.*

Top. Bot. 309. Syme, E. B. vii. 33. 1049. Nym. 588.

Native. Glareal. Dry hedgebanks. Very rare. P. Aug.

First record, *Sib.* 1794, *Melissa Nepeta*, *L.*3. *Swere.* Broughton, *Hb. R. B.*4. *Ray.* Headington Wick, Bayswater, *H. Bos.*5. *Isis.* Eynsham on the way to Stanton Harcourt, *Sib.* (Top. Bot. 309, Bidwell specimen). Eynsham, *H. Bos.* 1857.*Berks.* Bagley, *H. Bos.*, 1861. Blewbury, Hampstead Norris, *Brit.* Roadside near Bagley Wood, 1885. Gloster, W., St. Vincent's Rocks.**C. arvensis**, *Lam.* *Basil Thyme.**C. Acinos*, *Clair.* *Thymus Acinos*, *L.*

Top. Bot. 308. Syme, E. B. vii. 32. 1048. Nym. 588. Bx. 479.

Native. Agrestal. Dry sandy Oolitic and Chalky fields, dry banks.

Local. A. June-Sept.

First record, *W. Turner*, 1548. *Names of Herbes*: '*Clinopodium* groweth plentifully about Bon by the Rheyne syde, and I heare say that it groweth also about Oxford; it may be called in English Horse Thyme, because it is like Great Thyme.' See Fig. and description in *Turner's Herbal*, p. 150, ed. 1568.1. *Stour.* Tadmarton Heath, *A. Fr.* Also var. *alba!*2. *Ouse.* Mixbury, *R. C. Pryor!* Hardwick.

3. **Swere.** Stone-pit at Broughton, *Gull.* North Newington, rare, *Bees.* Somerton, *A. Fr.*
 4. **Ray.** Headington Wick, *Sib.* Between Kirtlington Park and village of Weston! *W. Wilson Saunders.* Between Upper Heyford and the Leys, and thence to Kirtlington, *Bz.* Stow Wood! Bletchington, *H. Bos.* Beckley, Headington Wick, see *Rep. of Rec. Club*, 1880. Railsides, Kirtlington.
 5. **Isis.** Stonesfield! South Leigh, *Sib.*, *Thymus Acinos*, L. Between Stonesfield and Blenheim Park! *Bz.* Asthalleigh, *F. Westell.* Wychwood, *H. Bos.* Charlbury, Brize Norton, Tangle. y.
 6. **Thame.** Between Bullington and Cowley Lane, *Bz.* Shotover, *H. Bos.!*
 7. **Thames.** Between Nettlebed and Henley, *A. Fr.* Caversham! Goring, *Newb.* Watlington, *H. Bos.* Ipsden, Nettlebed, Whitchurch.
- Berks.** Cumnor, Tubney, Boar's Hill.

ORIGANUM. L.

O. vulgare, L. *Marjoram.*

Top. Bot. 307. Syme, E. B. vii. 29. 1045. Nym. 592. Bz. 354.
Native. Glareal. Dry banks, chalky and limestone pastures, etc.
Locally common. P. July-Sept.

First record, *Sib.* 1794.

3. **Swere.** Bloxham Road, *T. Bees.*

4. **Ray.** Headington Wick, *Bz.* 1831. Stow Wood.

5. **Isis.** Under Woodstock Park Wall, between 'Leathern Bottle' and Ashford Mill, Stonesfield, 1831, *Bz.* Handborough, Charlbury, Stonesfield, Mill Wood, Lyneham Camp, Wychwood.

7. **Thames.** With pink and white flowers, Stokenchurch, Ibstone, *Pamplin and Irvine.* Henley, *Bz.* Caversham, Watlington, Swincombe, Bledlow, *H. Bos.* Near Flowing Spring, *A. Fr.* Chinnor, Penley Wood, Whitchurch, very large, Mongewell, Withy Coppice, Stoke Row, Ilvingden; common on the chalk where free from drift and tertiary deposits.

Berks. Streatley, Moulsoford.

THYMUS. L.

T. Chamaedrys, Fr.

Comp. Cyb. 545. Nym. 593. Syme, E. B. vii. 27. 1044. Bz. 127.

Native. Glareal, pascual. Heathy ground, chalky pastures. Local.
P. July-Sept.

First certain record, *Newb.*, about 1860.

3. **Swere.** Bretch, *A. Fr.*

4. **Ray.** Stow Wood.

5. **Isis.** Wychwood, *Hb. Linton!* Tainton.

6. **Thame.** Bullingdon Green, *Bart. Br. Plants*, is probably this, which is also represented in Plate No. 127. Bullingdon, 1885.

7. **Thames.** Caversham, *Newb.* Goring, see *Rep. of Rec. Club*, 1880.

T. serpyllum, (L.) Fr. *Wild Thyme.*

Top. Bot. 307. Syme, E. B. vii. 26. 1043. Nym. 593.

Native. Pascual, etc. Pastures, heaths, roadsides, etc. P. July-Sept.

First record, *Serpyllum hirsutum*. Abundantly over the Park, [Wychwood] Forest, *Blackstone*, 1737.

The lemon-scented *citrodorus* form is described by *Beesley* and *Baxter* as 'being frequent.'

The hairy form recorded by *Blackstone* is also given for Bullingdon Green by *Sib.*

MENTHA. L.

M. sylvestris, L. *Horse Mint.*

Syme, E. B. vii. 6. 1022. Nym. 594.

Native. Septal. Hedges, roadsides. Local and rare. P. Aug., Sept. First record, *Baxter* in *Walk. Fl.*, 1831.

1. **Stour.** Tadmarton Heath, roadside near, and var. *memorosa*.

3. **Swere.** Near Sun-rising, *T. Bees.*, var. *memorosa*.

4. **Ray.** Bayswater near the Mill, *Walker*, specimen in *Herb. Lawson*.

5. **Isis.** Roadside between Woodstock and Stonesfield, just after passing a lodge outside of Woodstock Park! *Bz.* 1831. North Leigh, see *Rep. of Rec. Club*, 1881. Between Freeland and Eynsham.

6. **Thame.** Cuddesdon, by the Wheatley roadside near the Palace, *R. Walk.*

* **M. viridis**, L. *Spear Mint.*

Syme, E. B. vii. 7. 1023. Nym. 596.

Denizen. Roadsides and waste places. Rare. Casual would probably be the more correct definition of it as an Oxford plant. P. Aug., Sept.

4. **Ray.** Bayswater, 1861, *H. Bos.* Roadside, Middleton Stoney, an outcast from the garden, Marston Lane.

5. **Isis.** Waste ground near the Railway Station.

Berks. Hampstead Norris, *Brit.* Bucks, Northants, Gloster, W., Warwick.

M. piperita, Huds. *Peppermint.*

Syme, E. B. vii. 9. 1024-5. Nym. 596.

Denizen. Paludal. Wet ditches. Very rare. P. Aug.-Oct.

First record, *the Author*, 1884.

3. Swere. North Newington Paper-mill Lane, *T. Bees*.
5. Isis. Between North Leigh Common and Handborough abundant.
Var. *M. officinalis*, Hull.
6. Thame. About the brick-yards on north side of Shotover.
- Berks. Wootton, *H. Bos.*, 1861. Northants, Harpole. Gloster, E., Warwick.

M. aquatica, L. *Water Mint.*

Top. Bot. 306. Syme, E. B. vii. 13. 1030. Nym. 596. Bx. 398.
Native. Paludal. River-, brook-, and canalsides, ditches, marshes, and wet places. Very common and widely distributed. P. Aug.-Oct. Our commonest mint.

First record, *Sib.* 1794.

Var. *subglabra*, Baker.

3. Swere. Somerton.
 4. Ray. Otmoor, Cherwell side, etc.
 5. Isis. Port Meadow, Eynsham, Kelmscott, etc.
 6. Thame. Iffley, Dorchester, etc.
 7. Thames. Goring, etc.
- The mint is much frequented by *Vanessa*, *Atalanta*, *Io*, and *Urtica*.

M. sativa, (L.) Fr.

Top. Bot. 306. Syme, E. B. vii. 15. 1031. Nym. 596.
Native. Paludal. River-, canal-, and brooksides, ponds, wet places. Rather common and widely distributed. P. Aug.-Oct.

First record, *Tilleman Bobart*, 1696, in *Ray*, ed. ii, referred to in *Morison*, iii. p. 369, as *Mentha rotundiore folio glabro*, *Pulegii flore nobis in aquis et fonticulorum scaturiginibus e monte Shotover dicto, binis miliaribus ab Oxonia dissito emanantibus a charissimo fratre Tillemano sponte nascenti reperta est*. In the *Linnean Trans.* Sir J. E. Smith refers this to *sativa*. See also *Sole's Mentha Brit., Bot. Guide*, etc.

Var. *genuina* ; *rivalis*, Syme.

3. Swere. Banbury, *Bees*.
4. Ray. Otmoor.
5. Isis. Bruern, Freeland.
6. Thame. Cowley.
7. Thames. Caversham.

Var. *paludosa*, Sole.

4. Ray. Islip, *Rev. Moyle Rogers*. Otmoor.
5. Isis. Port Meadow ; canalside, Oxford.
6. Thame. Littlemore.
7. Thames. Caversham, Goring.

Var. *subglabra*, Bak.

4. Ray. Otmoor.
5. Isis. Bruern, Osney.

[*M. rubra*, Sm. Syme, E. B. vii. 16. 1033.

Mr. J. G. Baker says of Ray's plants, 'one collected by Bobart is *M. rubra*;' can this be Tilleman's plant?

Northants rare. Warwick.]

***M. gentilis*, L.**

Syme, E. B. vii. 1037. Nym. 597.

Native. Paludal. Marshy fields. Very rare. P. Sept.

First record, *the Author*, 1885.

6. Thame. North side of Shotover above the brick-yards.

Warwick.

***M. cardiaca*, Baker (Syme).**

Syme, E. B. vii. 17. 1035. Oxford.

Denizen. Roadsides and waste places. P. July-Sept.

First record, *H. Boswell*, 1858.

4. Ray. Marston Lane, *H. Bos.* Waste ground between St. Clement's and Marston Lane, 1881, see *Rep. of Rec. Club*.

5. Isis. Near Woodstock, *H. Bos.*, 1865, see *Journ. Bot.*, 1865, p. 233, and Syme, E. B.

[Var. *gracilis*. Syme, E. B. vii. 18. Warwick.]

***M. arvensis*, L. Field Mint.**

Top. Bot. 307. Syme, E. B. vii. 21. 1038. Nym. 597.

Native. Agrestal. Damp cornfields, riversides, and wet places. Not common, but widely distributed. P. July-Oct.

First record, *Calamintha aquatica*, with variegated leaves in Oxford, Plot, 1677.

2. Ouse. Mixbury.

3. Swere. Common about Banbury, *A. Fr.*

4. Ray. Marston.

5. Isis. Freeland, Bruern.

6. Thame. Thame, *Hb. Bx.* Iffley, *Hb. Lawson.* Dorchester, Shotover.

7. Thames. Lewknor, Mongewell, Assenton, Woodcote, Binfield, Cane End, Nettlebed.

Berks. Boar's Hill, *Dyer.* Longworth.

***M. Pulegium*, L. Pennyroyal.**

Top. Bot. 307. Syme, E. B. vii. 23. 1041. Nym. 597.

Native. Inundatal. Wet heaths and commons. Very rare. P. July-

record, *Sib.* 1794.

4. **Ray.** Otmoor, *Sib.*

5. **Isis.** Binsey, Port Meadow, *Sib.*, also *Bx.* in *Purton*. Ramsden Heath, *T. Westcombe*.

7. **Thames.** On a common near Ibstone in great plenty, and very fine, especially on the margin of some small ponds, *Bx.* 1824. Ponds near Goring, 1878, *H. Bos.* Caversham, *Hb. Br. Mus.*, *J. Carroll*, 1849.

Berks. Tilehurst Common, *Brit.*

[*M. pubescens*, *W.* Gloster, *E.*]

[*M. rotundifolia*, *L.* Bucks, Northants, very rare. Gloster, *W.*, Warwick, very rare.]

[*M. alopecuroides*, *Hull.* Warwick, casual, extinct.]

LYCOPUS. *L.*

L. europæus*, *L. *Gipsywort.*

Top. Bot. 303. Syme, *E. B.* vii. 2. 1019. *Nym.* 597. *Bx.* 167.

Native. Paludal. River, canal, and ditch sides. Common, and recorded from all the districts, except the Stour, in which it may occur.

P. June–Sept.

First record, *Sib.* 1794, who notices *Variet hirsutie et foliorum divisuræ*.

ORD. LVII. LENTIBULARIÆ, *Rich.*

UTRICULARIA. *L.*

***U. vulgaris*, (*L.*) Hayn.** *Bladderwort.*

Top. Bot. 332. Syme, *E. B.* vii. 126. 1125. *Nym.* 598. *Bx.* 349.

Native. Lacustral. Slow streams, ditches, ponds. Local. *P.* July, Aug.

First record, *Sib.* 1794.

4. **Ray.** Otmoor, *Sib.*! Summertown, *H. Bos.* Railside between Merton and Wendlebury, Marston, Cherwell side, not quite typical.

5. **Isis.** Ditches right-hand side of Botley Road, *Sib.* Opposite first drawbridge beyond Heyfield's Hut, *Bx.* Between Bainton and Burford, *Rev. W. S. Rufford* in *Purton*. Wolvercote Ponds, *H. Bos.* Small ponds by railside above Wolvercote, abundant. In a small pond under a bridge on the Botley Road.

6. **Thame.** Nuneham.

Berks. Iffley to Sandford in ditches, Kennington, South Hinksey, Bablock Hithe.

The interesting fact of the power possessed by this plant of being able to digest young fish, was first noticed by Mr. Geo. Simms in the *Utricularia*

growing about Oxford. Its having carnivorous properties had been previously pointed out by Dr. Darwin and other Naturalists.

[*U. minor*, *L.* Berks, Northants (?), Warwick.]

PINGUICULA. *L.*

P. vulgaris, *L.* *Butterwort.*

Top. Bot. 330. Syme, E. B. vii. 123. 1121. Nym. 598.

Native. Uliginous. Peaty marshes. Local. Rare and decreasing. *P.* May-July.

First record, 'In a marsh about a mile from Oxford near a village called Herington,' *Parkinson's Theatrum*, 1640. 'Plentiful about Oxford,' *Merrett*, 1666. *Pinguicula sive Samicula Ebor.*

2. Ouse. Cottisford Heath, *R. C. Pryor.*

3. Swere. Canalside toward King's Sutton, *T. Bees.* ? If on Oxon side.

4. Ray. Headington Wick Copse, *Sib.* ! still there in 1885. Bog by side of Noke Wood, *T. Thurland.* Bog near Stow Wood, *Bx.* 1830! 1884.

5. Isis. Cromwell Pits near Chipping Norton, *T. Bees.*

6. Thame. Hockley-in-the-Hole, MS. note in copy of *Johnson's Mercurius* which had belonged to Blackstone and other Botanists. Bullington Green, *Sib.* ! 1885. Mr. Newbould says the corolla lobes overlap in the Bullington plant.

7. Thames. Henley Hill, *Wh. in Walk.* Appears an erroneous record.

Berks. Boar's Hill, Frilford. In all the border counties.

ORD. LVIII. PRIMULACEÆ, Vent.

LYSIMACHIA. *L.*

L. vulgaris, *L.* *Yellow Loosestrife.*

Top. Bot. 336. Syme, E. B. vii. 144. 1161. Nym. 599.

Native. Paludal. River-banks. Local, not rare. *P.* June-Sept. First record, *Sib.* 1794.

2. Ouse. Mixbury.

3. Swere. First bridge over Cherwell towards King's Sutton, just beyond Franklin's Knob, Twyford, *T. Bees.* Wykham Brook, *E. Walford.*

4. Ray. Otmoor, *Sib.* Kidlington, Islip, near Bicester, *H. Bos.* Parson's Pleasure, *T. Thurland.* Oxford, *Hb. Lawson.* North side of Magdalen College Meadow, *Hb. Bx.* Heyford, *Rev. E.* Fox, very fine! Rousham, Stow Wood.

5. **Isis.** South Leigh, Binsey Lane, *Sib.* Botley Roadside, *Bx.* Minster Lovell, Cogg's, *F. Westell.* Between Wytham and Eynsham, *H. Bos.*! Canalside Oxford; at intervals on the river-banks from Eynsham to Kelmscott; in a marsh near Duke's Lock, six feet high.
6. **Thame.** Tiddington, *A. Fr.* Long Meadow! *Bx.* Sandford! Nuneham! *H. Bos.* Dorchester, *Rev. F. Bennett.* Iffley.
7. **Thames.** Goring, Maple Durham, Whitchurch, etc.

L. nummularia, L. *Moneywort. Creeping Jenny.*

Top. Bot. 337. Syme, E. B. vii. 148. 1144. Nym. 599.

Native. Paludal. Wet meadows, streamsides, damp woods, Common in low situations throughout the county. P. June-Aug.

First record, *Wm. Coles* in *Adam in Eden*, 1657.

Christ Church Meadow, Oxford! and especially abundant at Otmoor. Some Botanists have doubted if this plant were really native on account of its being barren, but *Cardamine pratensis* also rarely produces seeds. Are these not rather instances in which the plants have become specialised in order to accustom themselves to a habitat frequently submerged, the one propagating itself by runners and the other by its leaflets? In this county, at any rate, I have no doubt of its being indigenous.

L. nemorum, L. *Wood Pimpernel.*

Top. Bot. 338. Syme, E. B. vii. 149. 1145. Nym. 599. *Bx.* 310.

Native. Sylvestral. Woods and thickets. Local and rather rare, especially in the north of the county. P. May-Aug.

First record, *Wm. Coles*, 1657.

2. **Ouse.** Mixbury Plantation, *R. C. Pryor.*

4. **Ray.** Stow Wood, *Wm. Coles*, 1657! 1885. Headington Wick Copse, *Bx.* and *Walk.*

5. **Isis.** Near Chipping Norton, *Gull.* Woods about Church Handborough! *Bx.* Pinsley Wood, Wychwood.

6. **Thame.** Shotover, *Bx.*! still there in 1885.

7. **Thames.** Stokenchurch, *Sib.*! Nettlebed, *A. Fr.*! Wormsley, Henley, *Bx.*! Shirburn, Watlington, Cowleaze, Ipsden.

Berks. Bagley, *Rev. E. Fox.* Streatley.

SAMOLUS. L.

S. Valerandi, L.

Top. Bot. 339. Syme, E. B. vii. 155. 1151. Nym. 600. *Bx.* 11.

Native. Paludal. Ditches in marshy situations. Very rare, nearly extinct. P. June-Aug.

First record, *Bobart* in *Morison*, 1699.

Planta heteroclita rotundifolia minus crenati Beccabung. foliis pentapetala, capsula alsines quinquefida, Morison, ii. 324. 5. 3, described as two separate species by error. See *Ray (Dill.)*, p. 283.

4. **Ray.** Peat Bog under Headington Wick Copse, *Sib.* Ditto, *A. Tayler, Esq.* Meadow between Oddington and the Grange, *Bz.* 1820. Cherwell banks between Magdalen Bridge and King's Mill, *W. H. Baxter.* Cherwell Meadows near Marston Ferry, 1885.
 5. **Isis.** On north side of right-hand side of ditch going from Heyfield's Hut and Port Meadow, *Bz.* 1820.
 6. **Thame.** In fossis prope Ptochodochium D. Bartholemei et prope pagum Cowley, *J. Bobart.* Bog under Bullingdon, *Hb. Lawson.* Ditch in Cowley Marsh, *Sib.* Ditto, *H. Bos.*, 1861, still there in 1885.
- Berks.** Easthampstead, *Bz.* Northants, rare. Gloster, Warwick.

ANAGALLIS. L.

A. cærulea, Schreb. *Blue Pimpernel.*

Syme, E. B. vii. 151. 1147. Nym. 601.

Native. Agrestal. Cultivated fields. Rare. A. June–Nov.

First record, *Parkinson's Theatrum*, 1640.

2. **Ouse.** Cottisford Heath, *T. Brayne.*

3. **Swere.** Middleton Stoney, *Sib.*, do. *F. T. Richards*, 1883.

4. **Ray.** Steeple Aston, *Rev. E. Fox.* Between Kidlington and Woodstock, *H. Bos.* Weed in St. John's Gardens, Botanic Garden, etc. Tackley.

5. **Isis.** Charlbury, *Sib.* Botley, *Parkinson.* Fawler, *T. Westcombe.* Burford, *Prof. Daubeny.* Tangley, *Bicheno.*

6. **Thame.** Beyond Cowley Marsh and on Bullingdon Green, *Rev. W. Kay in Walk.* Dorchester, *Rev. F. Bennett.*

Berks. South-west of South Hinksey, *Bz.* Wootton Fields, *Hb. Br. Mus.*

A. arvensis, L. *Pimpernel.* *A. phœnicea, Lmk.*

Top. Bot. 339. Syme, E. B. vii. 150. 1146. Nym. 601. *Bz.* 29.

Native. Agrestal. Cultivated fields. Common. A. May–Nov.

First record, *Plot.* 1677, with white flowers. Also in Cowley Field white flowers *J. Bobart in Ray*, ed. ii. Dorchester, *Rev. F. Bennett*, and var. *carnea*, *Schrank* at Dorchester, *Bennett.* Headington, Whitchurch, Chinnor, etc.

A. tenella, L. *Bog Pimpernel.*

Syme, E. B. vii. 152. 1148. Nym. 601.

Native. Uliginal. Peat bogs. Very rare. P. July, Aug.

First record, *Sib.* 1794.

4. **Ray.** Under Headington Wick Copse, *Sib.* / 1885. Most abundant on slope of ground recently cleared, Marston near the Ferry.

5. **Isis.** Ramsden Heath, *T. Westcombe.* Southcombe, *T. Bees.* Clanfield, *Hb. Bz.*

6. **Thame.** Bullingdon Green, *Sib.* / 1885. Riverside Iffley, *Hb. Lawson.* Railside near Wheatley Tunnel.

Berks. Buckland, *H. Bos.* Bagley Wood, Frilford.

Mr. Watson accidentally omitted this from Top. Bot.

CENTUNCULUS. L.

C. minimus, L. *Small Chaffweed.*

Top. Bot. 383. Syme, E. B. vii. 153. 1149. Nym. 601. Bx. 296.

Native. Ericetal. Damp heathy ground. Very rare. A. June-Aug.

First record, *Honble. J. Leicester Warren*, 1872.

7. Thames. Binfield Heath. Still there with *Radiola*, 1885.

Berks. Sonningwell, *Dr. Lightfoot*. Bucks, Warwick.

HOTTONIA. L.

H. palustris, L. *Water Violet.*

Top. Bot. 336. Syme, E. B. vii. 130. 1128. Nym. 602. Bx. 421.

Native. Lacustral. Ditches and slow streams. Locally abundant.

P. May, June.

First record, *Wm. Coles*, 1657, 'Hooded Water Milfoil about Oxford' and *Millefolium aquaticum floridum*, Water Gillyflower. In all the ditches about Oxford, *Merrett*, 1667.

4. Ray. Magd. Coll. Meadow, *Bx.* Cherwell above the Parks, *H. Bos.* Marston Fields.

5. Isis. Ditches round Ch. Ch. Meadow, *Sib.* Stanton Harcourt, *W. T. Dyer*. Port Meadow! *Bx.* Bampton, Binsey, *H. Bos.* Radcot, *F. Westdl.* Between Bainton and Burford, *Rev. W. Rufford in Purton*. Near Yarnton, *H. Ridley*. Blenheim, Wolvercote, Botley, Godstow.

7. Thames. Near Goring one year only, *Jas. Walker, Esq.* North Stoke.

Berks. South Hinksey, Kennington, Bablock Hithe.

PRIMULA. L.

P. vulgaris, Huds. *Primrose.*

Top. Bot. 334. Syme, E. B. vii. 131. 1129. Nym. 603.

Native. Sylvestral. Woods, thickets, hedgebanks, etc. Common and generally distributed, especially abundant in Wychwood, Woodstock, and the Chiltern Woods. P. March-Sept.

First record, *Sib.* 1794. *P. acaulis*, Jac.

The Primrose will probably become extirpated from many of its haunts if the raids made at present upon it continue, thousands of roots being yearly dug up to be sold in the streets.

Var. *P. variabilis*, Goup., *vulgari-officinalis*, Gren. *OxHp.* A series of hybrids of the Primrose and Cowslip is included under the above name. The true Oxlip *P. elatior* of Jacquin does not occur in the county.

4. Bay. Steeple Aston, *Rev. E. Fox*. Headington Copse, Stow Wood, *Sib. elatior* species.
5. Isis. South Leigh, *Sib*. Cornbury Park, *H. Bos*. Wilcote, Handborough.

The caulescent state has been noticed in Wychwood.

P. officinalis, L. Cowslip.

Top. Bot. 334. Syme, E. B. vii. 133. 1130. Nym. 603. Bx. 89.

Native. Pascual. Pastures, hedgebanks, woodsides. Common. April, May.

First record, *Sib*. 1794.

The Cowslip occurs in all the districts and is especially abundant on oolitic pastures. Magnificent specimens occurring near Lineham Camp. It is also fine on the chalk downs, particularly on the wood borders. The railside between Yarnton and Ascot affords a great show of them.

‘Her foot the Cumnor cowslips never stirred.’

‘But many a dingle on the loved hill side

Where thick the cowslips grew.’—MAT. ARNOLD’S *Thyrsis*.

ORD. LIX. PLANTAGINEÆ, Vent.

PLANTAGO. L.

P. Coronopus, L. Buck’s-horn Plantain.

Top. Bot. 342. Syme, E. B. vii. 173. 1668. Nym. 617.

Native. Glareal. Dry sandy pastures, roadsides. Very rare. A. June, July.

First record, *Dillenius* about 1745.

1. Stour. Tadmarton Heath, this is probably in the Swere drainage.
3. Swere. Top of Milcomb Lane on and near boundary sand wall, *T. Bees*.
5. Isis. Behind the Observatory, *Sib*.
6. Thame. Between Cheney Lane and Shotover, *Dillenius*, also *Bx.*, 1823. Bullingdon Green, *Rev. E. Fox*, also introduced from there in New College Garden, *Rev. Newton Young* in *Walk*.

Berks. Wootton Heath, Boar’s Hill, Frilford. Its absence from Shotover and Stow Wood is rather remarkable. The enclosure of Bullingdon Green has extirpated it, and it has also disappeared from Cheney Lane, its old station being on a dry bank just beyond where a small stream crosses east of the Warneford Asylum. *Coronopus* must be now classed as one of our rarest plants. The Berkshire side still yields it in fair quantity. Bucks, Gloster W., Warwick, Northants extinct or very rare.

P. lanceolata, L. *Rib-grass.*

Top. Bot. 342. Syme, E. B. vii. 160. 1164. Nym. 619.

Native. Ubiquitous. Roadsides, pastures, waste and cultivated ground.

P. May-July.

First record, *Plot*, 1677, with variegated leaves. With branched scape at Cowley, 1884.

Var. *Timbali*, Jord.

6. Thame. Horsepath, Bullingdon.

7. Thames. Goring, Chinnor.

Var. *major*, Syme.

Common in grass-fields, cultivated ground, etc. I doubt its being worth a varietal name any more than the small form with spreading leaves and decumbent stalks, occurring in dry pastures and by roadsides.

P. media, L. *Hoary Plantain.*

Top. Bot. 341. Syme, E. B. vii. 169. 1165. Nym. 620.

Native. Meadows, pastures, roadsides. Common, especially on calcareous soil. P. May-Oct.

First record, *Sib.* 1794.

This occasionally has decumbent spikes.

P. major, L. *Way-bread.*

Top. Bot. 341. Syme, E. B. vii. 167. 1162. Nym. 620. Bx. 207.

Native. Pascual. Pastures, waysides. Common and generally distributed. P. June-Sept.

First record, *Dillenius* about 1730.

Var. *intermedia*, Gilib.

5. Isis. Port Meadow.

7. Thames. Nettlebed, Stokenchurch, *Hb. Dill.*, probably overlooked in other districts.

Var. *rosea*, Johnson's, Ger. Near Oxford, *T. Crapper*. Between Long Meadow and Iffley, *Bx. Br. Pl. plate 207*, also near Horley by *Miss Padbury* in *Beesley's list*.

LITTORELLA. L.

L. lacustris, L. *Shore-weed.*

Syme, E. B. vii. 17. 1169. Nym. 620. Bx. 284.

Native. Lacustral. Pools. Very local. P. June, July.

First record, *the Author*, see *Rep. of Rec. Club*, 1881.

7. Thames. Checkendon, Binfield, Woodcote Common.

Berks. Virginia Water, *Brit.* Bucks, Warwick.

ORD. LX. AMARANTHACEÆ, Br.

* *Amaranthus retroflexus*, L. Reich. Ic. v. 668.

Casual. Waste ground as at

3. Swere. Banbury Mill, A. Fr.

5. Isis. Mill Wood, F. T. Richards.

ORD. LXI. CHENOPODIACEÆ, Br.

** *Blitum virgatum*, L.

Casual. Appears in garden ground at Upper Heyford, Rev. E. Fox.

CHENOPODIUM. L.

Ch. rubrum, L. Red Goosefoot.

Top. Bot. 345. Syme, E. B. viii. 20. 1196. Nym. 623.

Native. Waysides, river-banks, waste places. Not uncommon. A. July-Oct.

First record, Plot, 1677, supposing this to be correctly referred, '*Atriplex vulg. sinuata spicata*, on dunghills about Oxford with *sinuata major* amongst which we suppose it has hitherto lain hid.' In Ray's *Hist. Pl.* p. 198, Ray says of *Atrip. sylv. latifol.* Lob. C. B., 'His addit aliam *Atriplicis sylvestris latifoliæ* speciem eruditissimus Vir D. Rob. Plot, quam *Atriplicem vulgarem sinuatam spicatam* appellat, quæ a *Pede anserino altero sive ramosiore J. B.* in eo saltem differt, quod *Fragiferæ* instar semina in globulos congesta caulibus arcte adhærentia gestet.'

3. Swere. *Beesley and Gulliver* no localities.

4. Ray. Ditch at back of Wadham Coll. Garden, 1844, Bz. Fencott, Rev. M. Rogers. Near the Parks, Otmoor, Marston, Water Eaton.

5. Isis. Eynsham! Wolvercote! H. Bos. Foxcott, Osney, Port Meadow.

6. Thame. Waterperry, A. Fr. Cowley, Bz. Albury.

Berks. Ferry Hinksey, Marcham.

A dwarf form approaching to Watson's *pseudo Botryoides* occurred in a muddy lane near Foxcott, but the stem was erect and not much branched.

Ch. Bonus-Henricus, L. Good King Henry. Wild Spinach. Fat Hen.

Top. Bot. 347. Syme, E. B. viii. 25. 1199. Nym. 623.

Native. Viatical. Roadsides, especially near villages. Rather local. P: July-Sept.

First record, Sib. 1794.

3. Swere. Broughton, Adderbury, North Newington! T. Bees. Tadmarton, Bloxham, Barford St. John, A. Fr. Hanwell, R. French.

4. Ray. Near Bicester, *Hb. Br. Mus. E. Chandler*. Heyford, *Rev. E. Fox*.
 5. Isis. Stonesfield, *Bx.*, not common about Oxford, Godstow, *Rev. R. Linton*. Bladon, *H. Bos*. Port Meadow, *Prof. Daubeny*. Cornbury Quarries, Charlbury, Bruern, Foxcott.
- Berks.** Childswell Farm, South Hinksey.

Ch. hybridum, L.

- Top. Bot. 23. ! 346. Syme, E. B. viii. 18. 1193. Nym. 623. Bx. 352.
- Native. Waste ground. Local and rare. A. Aug.-Oct.
- First record, *Sib.* 1794.
3. Swere. Rubbish heap Banbury, *T. Bees*.
 4. Ray. Weed in Bot. Gard., *Bx.* Back of Wadham College near the Parks, 1844, *Bx.*
 5. Isis. Waste ground near the Railway Station Oxford, Port Meadow, Osney. See *Rep. of Rec. Club*, 1881.
- Berks.** Botley. Northants, Warwick.

Ch. urticum, L.

- Top. Bot. 344. Syme, E. B. viii. 19. 1199. Nym. 623.
- Native (!) Rich waste ground. Very rare. A. Aug.
- First record, *Sib.* 1794, unlocalised.
3. Swere. *Beesley's list* 'Dunghills.'
- 'My specimen is from Oxon,' *Sm. Fl. Br.*
- Var. *C. intermedium* Bab. *Man.*, 293. M. et K.
- Syme, E. B. viii. 19. 1699.
4. Ray. Heyford, *Rev. E. Fox*.
- I have not seen this in Oxfordshire. It appears to be decreasing in Britain.
- Gloster, E. Warwick casual only.

Ch. murale, L. *Nettle-leaved Goosefoot.*

- Top. Bot. 346. Bees. list. Syme, E. B. viii. 17. 1192. Nym. 623.
- Native (!) Waste ground, rubbish heaps. Very rare. A. July-Sept.
- First record, *Sib.* 1794.
3. Swere. 'Rubbish,' A. Beesley, T. Brayne. 'I doubt this,' *T. Bees*.
 5. Isis. Railway Station Oxford, *W. T. Dyer Jour. Bot.* lx. Garden ground Hythe Bridge Street, 1867, *H. Boswell*, now built over.
- Bucks, Gloster, W., Warwick, *Bree* only; needs confirmation.
- * *Ch. opulifolium*, *Schrad.* Nym. 624.
- Casual. Waste ground. Rare. Aug.
5. Isis. Near the Great Western Railway Station, 1883.

Ch. album, L.

Top. Bot. 346. Nym. 624.

Native. Waste ground, waysides, etc. Abundant and generally distributed. A. July–Sept.

First record, *Sib.* 1794.

Var. *C. candicans*, Lam. Curt. Fl. L. 2. Syme, E. B. viii. 13. 1188.

Cornfields. Common in all the districts and fairly distinct.

Var. *C. viride* (L.), Reich. Syme, E. B. viii. 14. 1189.

Cultivated ground, waste places. Generally distributed. It merges by almost insensible gradations into the next form.

Var. *C. paganum*, Reich. Syme, E. B. viii. 14. 1190.

C. virens, L. C. Cultivated ground, waste places, manure heaps, etc. Widely distributed.

? **Ch. filifolium, Sm.** *C. viride*, Curt. non L.

Top. Bot. 346. Syme, E. B. viii. 15. 1191. Nym. 624.

Native (?). Waste ground, dunghills. Sibthorp 1794 no locality.

Ch. serotinum. Aug.

I have little doubt this intends *C. viride*, L. var. b. of preceding species. Bucks.

Ch. Vulvaria, L. *Stinking Orache.*

C. olidum, Curt. Top. Bot. 343. Syme, E. B. viii. 12. 1187. Nym. 624.

Native. Rubbish heaps and waste places. Rare. A. Aug., Sept.

First record, *Sib.* 1794.

5. Isis. Binsey, *Sib.*

6. Thame. Wheatley, *Rev. W. T. Bree in Purton.*

Bucks, Northants.

Ch. polyspermum, L. *All Seed.*

Top. Bot. 343. Syme, E. B. viii. 10. 1185. Nym. 624.

Native. Waste ground. Rare. A. July–Sept.

First record, *Sib.* 1794.

3. Swere. Garden ground not common *acutifolium*, *Bees.* Broughton, Banbury, *A. Fr.*

4. Ray. Charlton, *Rev. W. M. Rogers.* Summertown, *Rev. R. Linton.*

5. Isis. Medley Lock, *H. Bos.*

6. Thame. Iffley Lock, *H. Bos.* Albury pond-side *acutifolium.* Shotover north side, 1885.

Var. *C. cymosum*, Moq. Tand. Syme, E. B. viii. 11. 1635.

5. Isis. Rainside Port Meadow.

Berks, Bucks, Northants, Gloster, Warwick.

ATRIPLEX. L.

A. patula, L. *Spreading Orach.* Aggregate.

Top. Bot. 349. Nym. 626.

Native. Cultivated ground, waste places. Abundant and generally distributed. A. July-Oct.

First record, *Sib.* 1794.

Beesley says 'not common about Banbury.'

Var. *A. angustifolia*, Sm. *A. patula*, Wahl. non L.

Top. Bot. 349. Syme, E. B. viii. 29. 1202. Nym. 626.

Native. Cultivated ground, especially cornfields. Abundant and generally distributed. A. July-Oct.

First record, unlocalised, *Gulliver*; also in *Walker's Flora*.

It is our commonest agrestal form.

A. erecta, Huds. *A. patula*, vera.

Syme, E. B. viii. 29. 1203. Nym. 626.

Native. Cultivated ground, especially turnip and mangold fields, waste ground, hedge-sides, manure-heaps, etc. A. July-Oct.

First certain record, *A. French*, 1870.

Berks, Northants, Warwick.

A. hastata, L.

A. patula, Sm. *A. Smithii*, Syme. Syme, E. B. viii. 33. 1205. Nym. 627.

Native. Waste ground, gardens, roadsides, etc. Common. A. July-Sept.

First record, *Sib.* 1794.

2. Ouse. Hardwick.

3. Swere. Barford, etc.

4. Ray. Otmoor, Marston, etc.

5. Isis. Near Railway Station, *A. Smithii*, see *Rep. of Rec. Club*, 1880. Wolvercote, Port Meadow.

6. Thame. Iffley, Dorchester, etc.

7. Thames. Nettlebed.

Berks. Botley, Abingdon, etc.

A. deltoidea, Bab.

Native. Damp waste ground, river and brook sides. Not uncommon.

A. Aug.-Oct.

First record, *the Author*, see *Rep. of Rec. Club*, 1880.

4. Ray. Marston Lane, Cherwell side frequent, Otmoor, Kirtlington, near Woodstock Road Station.

5. Isis. Evenlode side near Handborough, Bruern, Port Meadow, *Rep. of Rec. Club*, 1880. Eynsham, near Duke's Lock.

6. Thame. Iffley riverside, Dorchester, Nuneham.

7. Thames. Mongewell, Sonning.

Berks. Thames side from Oxford southwards. Bucks, Northants, Warwick.

** *A. rosea*, L. Nym. 628.

Casual. Waste ground [Grimsbury Wharf, A. Fr. Northants.] Great Western Railway Station.

** *Salsola Kali*, L. Syme, E. B. iv. 8. 1630.

Casual. On waste ground between the Woodstock and Kingston Roads, Oxford (near St. Philip's Church), apparently on the site of a broken-up garden, Sep. 19, 1875, W. Whitwell. Mr. Boswell suggests it was introduced with sea-weed manure for an asparagus bed.

ORD. LXII. POLYGONACEÆ, Lind.

RUMEX, L.

R. Hydrolapathum, Huds. Great Water Dock.

Top. Bot. 357. Syme, E. B. viii. 51. 1220. Nym. 633.

Native. Paludal. River and stream sides, marshes. Abundant by the Thame, from Henley northwards, but thins out on the Cherwell above Heyford. It occurs also along the Thame from its entry into the county to its junction with the Thames about Dorchester, where it is very fine.

On the Upper Thames it is also frequent. 'At Radcot Bridge we direct attention to the luxurious growth of its flamboyant foliage, giving to it a gigantic character among its lighter and more graceful neighbour,' *Mr. S. C. Hall's Book of the Thames*. Mr. Wilson Saunders noticed it at Kirtlington with leaves forty-two inches long by eight inches broad. It is probably absent from the Stour district. It is a characteristic feature in paintings of the Thames scenery, being especially noticeable in Keeley Halswelle's pictures. P. July-Sept.

First record, Sib. 1794.

A plant with cordate leaves having a coarser reticulation and different tint to normal *Hydrolapathum* was noticed between Lower Heyford and Kirtlington, and also by the canalside near Worcester College Gardens, but in each case the plants were destroyed before fruiting. I strongly suspect these will prove to be *R. maximus*, Schreb.

R. crispus, L. Common Dock.

Top. Bot. 358. Syme, E. B. viii. 49. 1218. Nym. 633.

Native. Pastures, roadsides, waste and cultivated ground. Abundant throughout the county. P. June-Oct.

First record, Sib. 1794.

Var. *R. trigranulatus*, Syme.

On mud dredged from the Thames near Osney, 1885.

***R. acutus*, L.**

R. pratensis, M. K. *R. cristatus*, Wall. Syme, E. B. viii. 47. 1216. Nym. 634.

Native. Hedgesides. Rare or overlooked. P. June-Aug.

First record, *the Author*, 1884.

7. Thames. Woodcote Heath.

Berks. Boar's Hill, *W. T. Dyer*, 1867, *Rep. of Bot. Ex. Club*. Northants, Gloster, Warwick.

***R. obtusifolius*, (L.), Wall. *R. Friesii*, G. and G.**

Top. Bot. 359. Syme, E. B. viii. 46. 1215. Nym. 634. Bx. 454.

Native. Pastures, waste places, roadsides, etc. Very common. P. July-Sept.

First record, *Sib.* 1794.

***R. sanguineus*, Koch.**

Top. Bot. 359. Syme, E. B. viii. 41. 1211. Not good. Nym. 634.

Native. Stream-banks, woods, and thickets, hedgesides. Locally common. P. June-Sept.

Var. *R. viridis*, *Sib.* 1794. Nerves of leaf-veins green. *R. nemorosus*, Schrad.

2. Ouse. Shelswell.

3. Swere. Common about Banbury, *Bees*. Between Milton and Deddington, *A. Fr.*

4. Ray. Marston Wood, Magdalen College Walks.

5. Isis. Bladon, etc.

6. Thame. Thame, *Hb. Bx.* Dorchester.

7. Thames. Goring, Mongewell Wood, College Wood, Sunley Wood, Stoke Row, etc.

Berks. Bucks, Northants, Gloster, Warwick.

Var. *R. sanguineus*, L., Sp. Pl. Veins red.

3. Swere. Banbury, Crouch Lane, *A. Fr.*

4. Ray. St. Peter-in-the-East Churchyard, *Bx.* in *Purton*. Headington Hill on left-hand side going up, *Sib.* First record also as *Sib.* in *Sm. Eng. Fl.*

Walker has referred above stations to the green-veined variety by mistake.

***R. conglomeratus*, Murray.**

Top. Bot. 359. Syme, E. B. viii. 40. 1210. Poor. Nym. 634.

Native. Ditches, streamsides, marshes, etc. Common in all the districts. P. June-Aug.

First record, *Gulliver*, near Hardwick, about 1820, sub nom. *R. acutus*.

R. pulcher, L. *Fiddle Dock.*

Top. Bot. 360. Syme, E. B. viii. 44. 1214. Nym. 634.

Native. Viatical. Waysides, churchyards, etc. Rather rare. P. June-Oct.

First record, *Dr. Williams* in *Walker's Flora*, 1834.

3. **Swere.** Adderbury, Barford, Milton, Tadmarton Churchyard, Swalecliffe, *A. Fr.* Barford St. John, *F. French*.

5. **Isis.** Near Observatory, *Dr. Williams*. Handborough, Charlbury Churchyard, Minster Lovell.

6. **Thame.** Christ Church Meadow, *Dr. Williams*. Ifley, *Rev. E. Fox*.

Berks. Cotham. Northants, Gloster, Warwick.

R. palustris, Sm. *R. Steinii, B.*

Syme, E. B. viii. 43. 1213. Nym. 634. Curt. F. L. 3.

Native. Paludal. Streamsides. Very rare. B. Aug., Sept.

First record, *the Author*, see *Rep. of Rec. Club*, 1881.

4. **Ray.** By the Ray side, Otmoor, two plants. The dredging of the river appears to have destroyed them. I was unable to see them in 1884.

Not in the border counties.

R. maritimus, L. *Golden Dock.*

Syme, E. B. viii. 42. 1212. Nym. 635.

Native. Paludal. Marshes. Very rare. B. July-Sept.

First record, *Prof. Daubeny*, about 1830.

4. **Ray.** Otmoor on side of road to Oddington, *Prof. Daubeny* and *Baxter*! Blackthorn, *H. Bos.*, 1856.

5. **Isis.** Near Medley Lock, *H. Bos.* in *Hb. Br. Mus.* 1866, also 1884! Binsey Green, 1884.

6. **Thame.** Rycote Park, *Hb. Bz.* 1844. Northants, Warwick.

R. Acetosa, L. *Common Sorrel.*

Top. Bot. 361. Syme, E. B. viii. 54. 1223. Nym. 635.

Native. Pascual. Pastures, meadows, etc. Very frequent. P. May-July.

First record, *Sib.* 1794.

* *R. scutatus, L.*

Syme, E. B. viii. 54. 1222. Nym. 636.

Alien. Naturalised on walls of Merton College; pointed out to me by Mr. Patey; *Rep. of Rec. Club*, 1883.

E. Acetosella, L.

Top. Bot. 361. Syme, E. B. viii. 56. 1224. Nym. 636.

Native. Ericetal. Dry fields, heaths, waysides. Locally common.

P. May-Aug.

First record, *Sib.* 1794.

1. Stour. Tadmarton.

2. Ouse. Hethe, etc.

3. Swere. Between Wickham and Bodicote, Broughton, *Gull.* Hanwell, Neithrop, *A. Fr.*

4. Ray. Upper Heyford, Stow Wood, Headington Wick, etc.

5. Isis. Bruern, North Leigh, Finstock, Ramsden, etc.

6. Thame. Shotover, *H. Bos.* Nuneham, Thame.

7. Thames. Mongewell, Binfield, Nettlebed, Chinnor.

Berks. Bagley, Wootton, Wytham, etc.

POLYGONUM. L.

P. Convolvulus, L. *Black Bindweed.*

Top. Bot. 356. Syme, E. B. viii. 61. 1227. Nym. 637.

Native. Agrestal. Cornfields and cultivated ground. Generally distributed and rather common. A. July-Oct.

First record, *Sib.* 1794.

Var. *P. pseudo-dumetorum*, Wats.

Rich waste ground, gardens, etc.

4. Ray. Marston.

5. Isis. Ball's Gardens, St. Philip's, *Rev. F. Bennett.* Port Meadow, Osney.

6. Thame. Headington.

7. Thames. Goring, Crowmarsh.

P. Bistorta, L. *Snakeweed. Great Bistort.*

Top. Bot. 353. Syme, E. B. viii. 79. 1243. Nym. 637. Bx. 5.

Native. Fratal. Damp meadows. Rare. P. May-Aug.

First record, *Sib.* 1794.

3. Swere. Swerford, *Rev. E. Fox.* Poolyard, Hooknorton, *Bees.* Lovell's Lynches, *R. Fr.* Hanwell, *A. Fr.*

4. Ray. Gosford Bridge, *Sib.*, also *H. Bos.* 1856. Near Bicester, *H. Bos.* 1857.

5. Isis. Minster Lovell.

6. Thame. Sandford, *Rev. R. Linton.* Hall's Close at Holton, *Bx.*

Berks. Osney Meadow, *Walk.* Between the Mill and Ferry Hinksey.

P. amphibium, L.

Top. Bot. 354. Syme, E. B. viii. 77. 1241. Nym. 636.

Native. Ponds, rivers, ditches, etc. Frequent and generally distributed. P. July–Sept.

First record, *Sib.* 1794.

Var. *P. terrestre*. Damp fields. Rather common.

3. Swere. 2nd March near Canal, Gull. Mill Meadow, A. Fr.

4. Ray. Heyford, Marston, Magdalen College Meadow.

5. Isis. Wolvercote, H. Bos. Eynsham.

6. Thame. Dorchester, Sandford.

7. Thames. Mongewell.

P. lapathifolium, L.

Top. Bot. 354. Syme, E. B. viii. 75. 1239. Nym. 637.

Native. Agrestal. Cultivated ground, waste places. Common. A. July–Oct.

First record, *J. Bobart*, 1696, and first as British. *Persicaria mitis major foliis pallidioribus*.

3. Swere. Mill Field, Gull.

4. Ray. Otmoor, Marston, Elsfield, Heyford, etc.

5. Isis. Medley Lock, H. Bos. Eynsham, Bruern, etc.

6. Thame. In the land and furrows of Headington Field above St. Bartholomew's Hospital, half a mile from Oxford, sufficiently plentiful, *Jacobo Bobarto*, *Observ. et descript.*, Ray, ed. ii. Cowley, Shotover, Bullingdon, Dorchester.

7. Thames. Mongewell, Binfield, etc.

Berks. Boar's Hill, Childswell Farm.

Var. *P. maculatum*, *Sibth.* Fl. Ox. p. 129. *Spotted Stalked Snake Weed*.

Persicaria latifolia geniculata, caulibus maculatis, *Raii*, Syn. 145.

Polygonum pensylvanicum var. *caule maculato*, *Curt.* Fl. Lond.

P. nodosum, *Reich.* Ic. 496. *P. laxum*, *Bab.* *P. maculatum*, *Trim.* and *Dyer*.

Native. Cornfields, waste ground, river-banks, etc. Locally common.

A. July–Sept.

First record, *Sib.* 1794.

2. Ouse. Mixbury.

4. Ray. Otmoor abundant, Kirtlington. Marston riverside most abundant and typical.

5. Isis. Osney, Oxford, Wolvercote, Port Meadow.

6. Thame. Iffley, Sandford.

7. Thames. Goring.

Berks. Ferry Hinksey, Kennington. Bucks, Northants, Warwick.

Both forms *densum* and *gracile* occur.

Sibthorp also included a var. *P. salicifolium* as occurring on dunghills and in cornfields. It is Ray's *Persicaria maculosa procumbens foliis subtilis incanis* and is not rare.

P. Persicaria, L. *Persicaria.*

Top. Bot. 355. Syme, E. B. viii. 74. 1251. Nym. 637.

Native. Cultivated ground, river- and ditch-sides. Found abundantly in all the districts. A. July-Oct.

First record, Sib. 1794.

Var. *P. biforme*, Wahl. *P. elatum*, Syme.

Syme, E. B. 1238.

4. Ray. Otmoor.

5. Isis. Port Meadow, Osney.

The flowers vary from white, through light pink to red purple.

Var. *incana* of authors; leaves silvery white pubescence on both sides. Also occurs as at Osney, Marston, Clattercut, Otmoor.

P. Persicaria and *lapathifolium* appear to me connected by a series of forms.

P. Hydropiper, L. *Water Pepper.*

Top. Bot. 355. Syme, E. B. viii. 70. 1234. Nym. 638.

Native. Paludal. Wet places, ditches, stream-sides, etc. Not uncommon. A. Aug.-Oct.

First record, Sib. 1794.

3. Swere. Cherwell side near the Bridge, Gull. Banbury, Hardwick Road, A. Fr.

4. Ray. Otmoor.

5. Isis. Port Meadow, Osney, Bruern.

6. Thame. Thame, Hb. Bz. Albury, Iffley, Dorchester.

7. Thames. Woodcote, Checkendon, Sonning.

Berks. Bagley Wood, Ferry Hinksey, Wytham.

P. mite, Schrk.

Top. Bot. 355. Syme, E. B. viii. 73. 1236. Nym. 638.

Native. Paludal. Ditch- and stream-sides. Local. A. June-Sept.

First record, W. Baxter, 1839.

4. Ray. Magdalen Meadow, Bz. Otmoor, Marston, and a semi-prostrate form.

5. Isis. Ditch round Ch. Ch. Meadow, Bz. 1829. Port Meadow, Hb. Lawson! also Dyer. Jour. Bot. ix. Osney, Godstow.

6. Thame. Long Meadow, Bz. /

Berks. South Hinksey, Bz. 1839. Ferry Hinksey, Northants.

P. minus, Huds.

Top. Bot. 355. Syme, E. B. viii. 72. 1235. Nym. 638.

Native. Inundatal. Wet meadows and marshy ground. Local and rare. A. Aug.-Oct.

First record, *Sib.* 1794.

4. Ray. Otnoor, *Sib.* 1884. Summertown, *Rev. R. Linton.*

5. Isis. Port Meadow opposite Lower Wolvercote, 1820, *Bx.* in *Purton* 1884. Ramsden Heath, *Hb. Br. Mus. col. J. Westcombe*, 1846. Binsey, *H. Bos.* 1884.

Our plant has the leaves broader than represented in *E. B.*

Berks. South Hinksey, *H. Bos.* Northants.

P. aviculare, *L.* Knot-grass.

Top. Bot. 356. Nym. 639.

Native. Cultivated and waste ground, roadsides, gardens, etc.

Abundant and universally distributed. A. June-Oct.

First record, *Sib.* 1794.

The distribution of the varieties has been only imperfectly ascertained.

Var. *P. agrestinum*, *Jord.*

Cowley, see *Rep. of Rec. Club*, 1883. Bullingdon, Great Haseley, Mongewell.

Var. *P. rurivagum*, *Jord.* Cornfields.

Syme, *E. B.* viii. 67. 1231.

Cowley, Great Milton, Eynsham, Woodstock, Binfield, Goring.

Var. *P. vulgatum*.

Syme, *E. B.* viii. 65. 1229.

Common on waste ground, roadsides, footpaths, etc.

Var. *P. arenastrum*, *Bor.*

Syme, viii. 65. 1230.

Waste ground, cornfields, etc.

Port Meadow, Bullingdon, Iffley, Haseley, Littlemore.

* *P. Fagopyrum*, *L.* Buck Wheat.

Comp. Cyb. 556. Syme, *E. B.* viii. 59. 1226. Nym. 639.

Casual. Woods, waste places. A. July, Aug.

First record, *Sib.* 1794.

3. Swere. *Beesley's list.* Cultivated fields.

5. Isis. Combe, *Sib.* Charlbury, *Rev. R. Linton.* Osney, Mill Wood. Introduced with pheasant food.

6. Thame. Near Iffley, *H. Underhill.*

ORD. LXIII. THYMELEÆ, *Juss.*

DAFNE. *L.*

D. Laureola, *L.* Spurge Laurel.

Top. Bot. 362. Syme, *E. B.* viii. 86. 1247.

Native. Sylvestral. Woods, hedges. Local and rather rare. Sh.

Feb.-April.

First record, *Sir Jos. Banks*, 1760.

3. **Swere.** Wickham, *A. Bees*. Crouch Lane, Broughton, *A. Fr.* Wroxton, *O. V. Aplin*.

4. **Bay.** Near Oxford, *Sir Jos. Banks*. Headington Wick! *Rev. R. Linton*. Noke to Beckley.

5. **Isis.** Wychwood! *H. Bos.* Finstock, Sarsgrove.

6. **Thame.** Shotover, *Sib.*! 1884.

7. **Thames.** Henley, *Sib.*! *Ewelme, Newb.* Aston Wood, Hollandridge Lane, Great Wood, Ibstone, Aston Wood, Hardwick, Whitchurch, Maple Durham.

Berks. Cumnor.

D. Mezereum, L. *Mezereon.*

Syme, E. B. viii. 84. 1246. Nym. 640. Bx. 96.

Native. Sylvestral. Woods. Native on the Chilterns and possibly in Wychwood: bird-sown elsewhere. Sh. March-April.

First record, *Mr. Wheeler* in *Sm. Eng. Fl.* 1824.

2. **Ouse.** Ardley Wood, *Miss Griffith*! a single plant.

3. **Swere.** Worton Wood, *T. Bees*. 'Pratt.'

5. **Isis.** Wychwood, *Mr. Wheeler* in *Sm. Eng. Fl.* Hilcock's Coppice, Wychwood, *T. Westcombe*.

6. **Thame.** Shotover, 1832, *R. C. Pryor*, a single specimen.

7. **Thames.** Kingston Wood, *Miss Beatrice Taylor*. Stokenchurch Woods, wood near Chequers' Common, woods near Cadmore End. Native. See *Rep. of Rec. Club*, 1883.

Berks. Appleton Common, destroyed 1857, *H. Bos.* Tubney, Bisham, Frilsham, Eaton Stibble, *Brit.* Bucks, Wycombe Woods, Hambledon Woods.

ORD. LXIV. SANTALACEÆ, Br.

THESIUM. L.

T. humifusum, DC. *Toad-flax.*

T. linophyllum, L.

Top. Bot. 362. Syme, E. B. viii. 88. 1248. Nym. 643. Bx. 263.

Native. Pascual. Dry, chalky, and limestone pastures. Rare. P. June-Aug.

First record, *Dr. Lightfoot*, about 1770.

6. **Thame.** In old gravel-pit by the roadside between Bayswater and Stanton St. John, *Sib.* and *Bx.* Specimen in *Hb. Sherard*, 1798.

7. **Thames.** Caversham, *Dr. Lightfoot*. MS. note in *Huds. Fl. Ang.* Spec. in *Hb. Br. Mus.* Goring, *Hb. R. Linton*. Along the Grime's Dyke.

Berks. Streatley, Ilale, near Lowbury. Bucks, Gloster E.

ORD. LXV. ARISTOLOCHIEÆ, E.

[*Asarum europæum*, L. *Asarabacca*.

Top. Bot. [23]. Syme, E. B. viii. 90. 1249. Nym. 645. Bx. 250.
Extinct. Woods.

5. *Isis*. Eynsham Commom, *Parkinson's Theatrum*, 1640. Extinct.
Wild near Oxford, *Sowerby's Herb.*, Rev. Dr. Abbott.

'Mountainous woods, rare between Henley and Maidenhead. The drawing in *E. B.* from plant from this locality collected by Dr. Abbott, 1802,' either in Bucks or Berks.

'Bucks, Berks, with Oxford more dubiously,' Comp. Cyb. 613.]

* *Aristolochia Clematidis*, L. *Birthwort*.

Comp. Cyb. 557. Syme, E. B. viii. 91. 1250. Nym. 645. Bx. 28.
Denizen. Waste places, hedges near ruina. Rare. Sh. June-Sept.
First record, *Sib.* 1794.

5. *Isis*. Godstow, *Sib.*, also with *Tipula pennicornis*, 1812, *Bz. Journ.*
Bot. vol. ix., *Dyer*, see *Rep. of Rec. Club*, 1880! 1885. Kencott,
Dr. Goodenough in Bot. Guide.

6. Thame. Studley Priory, *R. Walker*.

Berks. In a hedge near Windsor, *Mr. Gotobed*.

[*Empetrum nigrum*, L. *Crowberry*. Sutton Park, Warwick.]

ORD. LXVI. EUPHORBIACEÆ, A. Juss.

* *Buxus sempervirens*, L. *Box Tree*.

Syme, E. B. viii. 95. 1252. Comp. Cyb. 558. Nym. 646. Bx. 42.
Alien. Occurs only as a planted shrub. April, May.
It is well naturalised at Bayswater and Goring.

Berrockshire quæ paga taliter vocatur a 'berroc' sylva ubi buxus
abundantissime nascitur, *Asser's Life of Alfred*, *Phyt.* iv. 873, o. s.

MERCURIALIS. L.

M. perennis, L. *Dog's Mercury*.

Top. Bot. 366. Syme, E. B. viii. 114. 1268. Nym. 646. Bx. 143.
Native. Sylvestral, septal. Woods, thickets, hedgerows. Common
and generally distributed; less frequent in the Chiltern Woods. P.
March-May.

First record, *Sib.* 1794.

Baxter found *Uredo confluens* on this plant about Oxford.

* *M. annua*, L. *French Mercury*.

Top. Bot. 366. Syme, E. B. viii. 115. 1269. Nym. 647.

Alien. Waste ground. Very rare. A. Aug.

First record, *Sib.* 1794. No one else appears to have noticed it in Oxford. It occurs as a weed in the Botanic Garden, where probably Sibthorp saw it. It has properly no place in our Flora.

Berks. On the loop railway line just below Reading, *F. Tufnail* / Gloster W.

EUPHORBIA. L.

E. helioscopia, L. *Sun Spurge. Wart-wort.*

Top. Bot. 363. Syme, E. B. viii. 99. 1254. Nym. 651. Bx. 368.

Native. Agrestal. Waste and cultivated ground. Frequent in gardens and generally distributed. A. July-Sept.

First record, *Sib.* 1794.

Baxter found *Uredo Helioscopiae*, D C. on it about Oxford.

E. amygdaloides, L. *Wood Spurge.*

Top. Bot. 366. Syme, E. B. viii. 105. 1260. Nym. 651.

Native. Sylvestral. Woods, hedgerows, thickets. Locally common. P. April-June.

First record, *Sib.* 1794.

1. Stour. Absent (?).

2. Ouse. Ardley Wood, rare.

3. Swere. Absent (?).

4. Ray. Stow Wood, *Sib.* / Beckley, Noke (absent from Piddington Wood), Headington Wick, very fine.

5. Isis. Tarwood, *Sib.* Woodstock, *Daubeny* / Copse near Ashford Mills, abundant at Hailey with *Cecidium Euphorbiae*, Pers., Bx. Wychwood, *Gull.* / Mill Wood, Ditchley.

6. Thame. Shotover, *Sib.* /

7. Thames. Maple Durham, *J. Carroll, Hb. Br. Mus.* Near Shiplake, Nettlebed, *A. Fr.* Stokenchurch, *Hb. Bx.* Pangbourne, Goring, Binfield, Withy Coppice, Queen's Wood, Penley Wood abundant and fine, Sunley Wood, Vernal's Wood, Ibstone, Ipsden, etc.

Berks. Bagley Wood.

The leaves of the rosettes are sometimes very hairy.

[*E. Cyparissias, L.* Syme, E. B. viii. 107.

Garden ground, Freeland, Oxon, *Rev. F. Bennett* /

Open slope close to wood, Sulham, Berks, *F. Tufnail.*]

E. Peplus, L. *Petty Spurge.*

Top. Bot. 365. Syme, E. B. viii. 111. 1265. Nym. 654.

Native. Agrestal. Cultivated ground, etc. Common in all the districts. A. July-Nov.

First record, *Sib.* 1794.

***E. exigua*, L.**

Top. Bot. 365. Syme, E. B. viii. 112. 1266. Nym. 654.

Native. Agrestal. Cornfields, waysides, gardens, etc. Common in all the districts, especially the Thames. A. or B. July–Nov.

First record, Sib. 1794.

Very variable. A biennial form occurred in fields on the chalk downs, and another with very acute leaves near Chinnor. The form with truncate leaves, *E. retusa*, D C., should be looked for as well as the plant with leaves three-lobed at apex, i. e. *E. rubra*.

***E. platyphyllos*, L.**

Top. Bot. 364. Syme, E. B. viii. 100. 1255.

Only record, Pryor in Top. Bot. 1883. No locality.

Northants, Thornborough. Berks, Gloster E.

*** *E. Lathyris*, L. *Caper Spurge*.**

Comp. Cyb. 558. Syme, E. B. viii. 113. 1267. Nym. 655.

Alien. Waste ground. Rare. P. June–Aug.

4. Ray. Summertown, Rev. R. Linton.

5. Isis. Near the Great Western Railway Station, Oxford.

Berks. In several places about Upton near Reading, springing up periodically for a year or two after the bushes have been cut down, and until choked by briars, Rev. Dr. Beeke. Northants, wild, Wakerley Wood.

ORD. LXVII. PLATANÆ, Lestib.

* *Platanus orientalis*, L. and *P. occidentalis*, L. *The Plane*.

Frequently as a planted tree about Oxford.

ORD. LXVIII. URTICACEÆ, E.**URTICA. L.*****U. dioica*, L. *Stinging Nettle*.**

Top. Bot. 367. Syme, E. B. viii. 127. 1279. Nym. 657. Bx. 298.

Native. Waste places, hedges, etc. Abundant in all the districts. P. July, Aug.

First record, Sib. 1794.

***U. urens*, L. *Small Stinging Nettle*.**

Top. Bot. 367. Syme, E. B. viii. 131. 1282. Nym. 657.

Native or Colonist. Waste ground, especially near villages. Generally distributed, but much less common than preceding species. A. June–Sept.

First record, Plot, 1677, 'with striped leaves.'

PARIENTARIA. L.

P. diffusa, M.K. *Pellitory of the Wall.*

Top. Bot. 367. Syme, E. B. viii. 126. 1278. Nym. 658. Bx. 224.

Native. Old walls, hedgebanks, etc. Common and recorded from all the districts. P. June-Sept.

First record, *Sib.* 1794. *P. officinalis, L.*

1. Stour. Sibford.

2. Ouse. Mixbury.

3. Swere. Wroxton, Broughton, Adderbury, *Bees.*

4. Ray. Elsfield, Islip, Piddington, New College Lane, etc.

5. Isis. Plentiful about Oxford, Godstow, Charlbury, etc.

6. Thame. Iffley, Dorchester, etc.

7. Thames. Goring, Ilvingden Farm, etc.

HUMULUS. L.

H. Lupulus, L. *Hop.*

Top. Bot. 367. Syme, E. B. viii. 133. 1284. Nym. 658. Bx. 342.

Denizen or native. Septal. Hedges and thickets. Not uncommon.

P. July, Aug.

First record, *Sib.* 1794.

1. Stour. Tadmarton.

2. Ouse. Mixbury.

3. Swere. Not common. West Street, between Mill Meadow and Grimsbury, *Bees.* Bloxham, Broughton Road, Swerford, *A. Fr.*

4. Ray. Wood Eaton, *Rev. R. Linton.* Kirtlington, Heyford, Marston Lane, Oddington, near Wadham College.

5. Isis. Binsey Lane, *Sib.* / Freeland, Fawler, Charlbury, Foxcott, Mill Wood, Cornbury, Kelmscott.

6. Thame. Iffley, *Hb. Lawson.* Thame, *Hb. Bx.* Wheatley.

7. Thames. Caversham, *A. Fr.* Ibstone, *A. Irvine.* Goring, Chinnor, Ipsden, etc.

Berks. Medley Grove, *Sib.* Cumnor, Ferry Hinksey.

**** Cannabis sativa, L.** *Hemp.*

Cyb. Br. ii. 372. iii. 506. Syme, E. B. viii. 1283.

Casual. Waste ground. Rare. A. Aug.

Near Great Western Railway Station, Port Meadow, Iffley, Bul-lingdon.

ORD. LXIX. ULMACEÆ, Mirb.

ULMUS. L.

U. montana, With. *Wych Elm.*

Top. Bot. 368. Syme, E. B. viii. 141. 1287. Nym. 659. Bx. 386.

Denizen or native. Woods and hedges. Tree. March, April.

First record, *Sib.* 1794. *U. effusa*, W.

1. **Stour.** Tadmarton, etc.

2. **Ouse.** Shelswell, etc.

3. **Swere.** Banbury, Bloxham, *A. Fr.* Common, Shutford, etc.

4. **Ray.** Marston Lane, *Sib.* ! Magdalen College Elm, *Walk.* Between Summertown and Water Eaton, *Bz.* Oddington, Headington Hill, Tackley, Magdalen Grove.

5. **Isis.** South Leigh, *Sib.* In a copse near Ashford Mills, *Bz.* Freeland, Wychwood, Woodstock, Christ Church Meadow.

6. **Thame.** Shotover, between Oxford and Iffley, *Bz.* Thame, *Hb. Bz.* Wheatley, Horsepath, Nuneham, Baldon, Dorchester, Tetsworth.

7. **Thames.** Large tree, Checkendon, Whitchurch, Chinnor, Binfield, Cookley Green.

The Magdalen College Elm measured, at two feet from the ground, 27 feet 4 in., breast high, 21 feet, *R. Walk.*, 1831.

In Oxfordshire the common people speak of the Wych Elm as a charm against witches, and that a person under the spell of witchcraft will be cured if struck nine times with a bough of this tree, *Phyt.*, n. s. vii. 167.

Var. *U. major*, Reich. Syme, E. B. 2542.

3. **Swere.** Near Broughton.

4. **Ray.** Tackley, etc.

Var. *U. nitida*, Syme. 'Branches without corky excrescences, leaves shining and glabrous above.'

6. **Thame.** Headington, etc.

***U. campestris*, (L.) Sm. Elm.**

Top. Bot. 368. Syme, E. B. viii. 137. 1285. Nym. 659.

Denizen or native. Hedges, woods, etc. Abundant. Tree. March, April. *U. suberosa*, Ehrh.

First record, *Plot*, 1677.

'Sir Thomas White, Lord Mayor of London, was warned in a dream he should build a college close to a triple elm, whereon he retired to Oxford and first met with something near Gloucester Hall that seemed to answer his dream. But afterwards finding another elm near St. Bernard's College, suppress not long before by King Henry VIII, more exactly to answer the circumstances of his dream, he left off at Gloucester Hall and built St. John Baptist College, which with the very tree besides it flourishes to this day,' *Plot*, p. 177.

'On Binsey Common stood an elm at the spurs next the ground at least six yards diameter,' *Plot*, 169.

'A great old elm formerly grew in Magdalen College Grove disbarked quite round, at most places 2 feet, at some at least a yard or 4 foot

from the ground, which for many years flourished as well as any tree in the Grove,' *Ibid*.

Mongewell celebrated for its fair woods in Leland; the principal tree is 79 feet high, 14 feet in circumference at three feet from the ground, 65 in extent of boughs, and contains 265 feet of solid timber. Bears an inscription, 'To the memory of my vald. friends, T. Tyrwhitt and Rev. C. M. Cracherode—

In this once favoured walk, beneath these elms,
Whose thickened foliage to the solar ray
Impervious, sheds a venerable gloom,
Oft in instructive converse we beguiled
The time which each returning year
To friendships call devoted.
Such things were; But are alas no more.'

S. DUNELM. *Strutt. Sylv. Br.*

Plot says 'on Bletchington Green there was an elm of so. capacious a hollow trunk, that it once gave reception to a poor . . . woman, excluded of all the houses in the parish to prevent her bringing a charge on it; who was delivered in it of a son.'

A fine tree 27 feet in girth in Holton Park, now very hollow.

A handsome tree in Clanfield village.

The Magdalen Grove Elms are of this species.

Var. *structa*, Lindl. *U. glabra*, Sm.

Syme, E. B. viii. 138. 1286.

U. folio angusto glabro, Plot, with smooth leaves, differs from *U. minor* of Parkinson and Gerard, but also from their *U. folio glabro*; at Hanwell, there is a whole walk of them besides others that grow wild in the coppices of the Park.

3. Swere. Hanwell as above, Bloxham, see *Rep. of Rec. Club*, 1883.

6. Thame. Cowley.

The richness of the Elms is particularly noticeable in the Thames valley from Mongewell southwards.

Berks. 'The signal elm that looks on Ilsey downs,
The single elm tree bright against the west.' M. ARNOLD.

ORD. LXX. CUPULIFERÆ, Rich.

FAGUS. L.

F. sylvatica, L. *The Beech*.

Top. Bot. 370. Syme, E. B. viii. 164. 1291. Nym. 660. Bx. 331.

Native. Sylvestral. Woods on the Chilterns, plantations, hedges, and parks elsewhere. Tree. March, April.

First record, *W. Coles*, in *Adam in Eden*, 1657.

'The Beech delighteth to grow in some places and not in others, for as in the Chiltern country no wood is more familiar, so in others, not far from it, the tree is a great rarity, as in Oxon where there is one growing between Oxford and Banbury, which is so famous that it is noted all over that county, and called the Beechen Tree, there being scarcely a traveller that goes by but takes special notice of it; ye fame makes many visit it, though it be somewhat out of the way, to cut their name upon the smooth bark so that now it is full of letters that there is scarcely any space left.'

'First heath behind Reading on the way to Oxford,' *Merrett*, 1666.

'At Cain End there are two beeches more strangely joined together a great height from the ground, for the bodies of these trees come from different roots and ascend parallel to the top, but are joined together a little before they come to bough, by a transverse piece of timber entering at each end into the bodies of the trees and growing jointly with them, for which reason it is commonly called the Gallows tree,' *Plot*, 173.

The Beech occurs in all the districts, but in the Stour, Ouse, and probably the Swere and Ray, only as a planted tree. It is likely a native of Wychwood. In the Forest and Park there are some fine specimens. In the Thame district it is as an introduced tree that it occurs, although seedlings here, as in other districts, are not unfrequent. On the Chilterns it is native, and forms the principal timber in the extensive coppices and woodlands; some fine trees may be seen in Ipsden Woods. The timber is used in the manufacture of chairs which is carried on at Wycombe, large quantities are partly prepared at Christmas Common, etc.

Bucks, Berks, native. Gloster E., probably native. Northants, denizen. Warwick, planted.

CASTANEA. G.

* *C. sativa*, *Mill.* *Sweet Chestnut.*

C. Vesca, *Lm.* *C. vulgaris*, *Lam.*

Syme, E. B. viii. 159. 1290. Comp. Cyb. 560. Nym. 660.

Denizen. Plantations. Rare. Tree. May.

3. Swere. Wroxton, *Gull.* Great Tew, between Bloxham and Tadmarton, *A. Fr.*

5. Isis. Freeland, Wychwood.

6. Thame. Nuneham, *A. Fr.*

** *Juglans regia*, *L.* *Walnut.*

Alien. Occurs as a planted tree in Cornbury Park, etc.

QUERCUS. L.

Q. pedunculata, *Ehrh.* *The Oak.*

Syme, E. B. viii. 145. 1288. Nym. 660.

Native. Woods, hedgerows, etc. Common. Tree. April, May.

First record, *Plot*, 1677.

'There was a hollow oak at Kidlington Green which was frequently used before the death of Judge Morton, before whose house it stood, for the imprisoning vagabonds and other inferior malefactors for the space of a night or so, till they conveniently might be had to the Gaol at Oxford; of which the hollow was so large within that it would receive 8 or 10 commodiously enough, the tree being 25 foot round the spurs.' *Plot* also refers to the discovery on Binfield Heath 'in a pond of a parcel of subterranean oaks, very fine and sound, but quite through to the heart as black as ebony.' *Plot* says 'there is an oak between Nuneham Courtney and Clifton, which from bough end to bough end stretches 81 feet. In circumference 243 feet, shading 560 square yards of ground.'

'At Ricot there was an oak somewhat bigger, by the Author of Dodona's Grove, called his Robur Britannicum, whose branches covered 972 square feet,' *Plot*, 1677.

'One of the finest specimens of pollard oak ever grown in England was sold lately at Liverpool. Its trunk was 14 feet in length and 21 feet in circumference, its actual weight, inclusive of the root, being 13 tons 7 cwt. This tree, which was grown near Chipping Norton, is to be used for furniture. It was opened at the Brunswick Saw Mills, and presented a rich brown appearance, resembling in every appearance tortoiseshell, and being perfectly free from shake, the tree is calculated to cut 70,000 feet of veneers, their value being estimated at 500 guineas,' *Weekly Times*, Jan. 23, 1876.

Dr. Stukely in his *Itinerarium Curiosum* says, the Magdalen College Oak 'is still standing, nigh to which the founder ordered his college to be built.' Magdalen was founded in 1448. The tree fell in 1789. Its girth was 21 feet 9 inches, the height about 72 feet. *Evelyn* in his *Sylva*, 1662, states that 'the branches shoot sixteen yards from the stem.' *Plot* observes 'that the branches cover a space of 768 square yards, and that 256 horses might stand under that tree, or allowing two square feet for a man, 3456 men,' *Plot*, 158. There is a fine tree in Cornbury Park whose trunk, at two feet from the ground, measures over 27 feet.

About Woodperry, in 1884, the trees were much infested with the round smooth gall, *Cynips linicola*. In Wychwood the oak spangles were frequent.

Q. sessiliflora, (Sleb.) Leight. *Durmast Oak*.

Syme, E. B. viii. 157. 1289. Nym. 660.

Native (?). Coppices, plantations. Tree. Apr., May.

First record, *J. Bobart*. *Quercus latifolia* mas *quæ brevi pedunculo est*, C. B. P. 419. In Bagley Wood and divers other places (Bagley is in Berks). *Ray*, ed. ii. 1696.

3. Swere. Bodicote Road, *Gull*.

5. Isis. Wychwood, North Leigh.

6. Thame. Thame, *Hb. Bz.* Stanton St. John 'with stalkless leaves.' Between Shotover and Cuddesdon 'the latter with longish tiled imbricated scales,' *R. Walk.*

* *Quercus Ilex*, *L.* *The Evergreen Oak* and *Q. Cerris*, *L.* *Turkey Oak.*
Occur in parks and plantations.

CARPINUS. *L.*

C. Betulus, *L.* *Hornbeam.*

Top. Bot. † 371. Syme, E. B. viii. 176. 1293. Nym. 662. Bx. 234.

Native on the chalk, planted elsewhere. Tree. May.

First record, *Gull.* 1820.

3. Swere. Berry Moor, *Gull.* Not wild, *Bees.* Bodicote Road, *R. Fr.*
Broughton, *provincialis.*

4. Ray. Between Oxford and Summertown, *Bz.* Magdalen College Walks.

5. Isis. Christ Church Meadow and var. *provincialis*, Gay. Wychwood.

6. Thame. Shotover, planted.

7. Thames. Woodcote, Aston, Chinnor, Stokenchurch, Ibstone, etc., wild.

Berks. Near Remenham. Bucks, native. Northants, probably native.
Gloster W. Warwick, planted.

CORYLUS. *L.*

C. Avellana, *L.* *Hazel.*

Top. Bot. 372. Syme, E. B. viii. 178. 1294. Nym. 663. Bx. 193.

Native. Sylvestral. Woods, thickets, hedges. Common throughout the county, abundant in many of the Chiltern Woods. Shrub or Tree. March, April.

First record, *Plot*, 1677, 'in a pond at Rotherfield Peppard some oaks were found with the wood black to the centre and with the trees also plenty of hazel-nuts which Time's iron teeth had not yet cracked.'

ORD. LXXI. SALICINEÆ, Rich.

POPULUS. *L.*

P. alba, *L.* *White Poplar.*

Comp. Cyb. 312. Syme, E. B. viii. 192. 1299. Nym. 663.

Denizen. Sylvestral. Woods, hedges. Not very common. Tree. April.

First record, *Plot*, 'The Abele tree was advantageously propagated at Waterstock, 1677.'

3. Swere. Near Cropredy, etc.
4. Ray. Otmoor, *Rep. of Rec. Club*, 1881. Parsons' Pleasure, etc.
5. Isis. Handborough.
6. Thame. Near Iffley.

P. canescens, Sm. *Grey Poplar.*

Syme, E. B. viii. 149. 1300. Nym. 663.
Denizen. Sylvestral. Tree. March, April.
In *Walker's Flora* unlocalised, 1834.

1. Stour. Tadmarton.
2. Ouse. Bucknell.
4. Ray. Noke, near Kidlington.
5. Isis. Eynsham.
6. Thame. Dorchester.
7. Thames. Woodcote.

Dr. F. Arnold Lees noticed near Shiplake four trees of some size by the Thames which he thinks are var. *denudata*, Braun referred to *P. hybrida*, M. B. in *Reich. Icones*.

P. tremula, L. *Aspen.*

Top. Bot. 373. Syme, E. B. viii. 196. 1301. Nym. 664.
Native. Sylvestral. Woods, hedges. Sparingly distributed through the county, and usually as a planted tree. March.
First record, *Sib.* 1794.

Var. *glabra*, Syme.

4. Ray. Headington Wick, Magdalen College Walks.
 5. Isis. Bladon Wood, see *Rep. of Rec. Club*, 1880.
- Var. *villosa*, Lang. Reich. Exc. 1633.
4. Ray. Otmoor, Marston Fields, Headington Wick, native.
 5. Isis. Wychwood, native.
 6. Thame. Woodcote, Shotover.

* **P. nigra, L.** *Black Poplar.*

Comp. Syb. 561. Syme, E. B. viii. 198. 1302. Nym. 664. Bx. 506.
Denizen. Hedges, etc. Not uncommon. Tree. March.
First record, *Sib.* 1794.

Baxter noticed *Erysiphe adunca*, *Uredo Populina*, Grev., *Erineum Populin.*, *Sphaeria centhocarpa*, *E. aureum* and *Xylonia populinum* on this tree in Cowley Marsh.

1. Stour. Sibford.
3. Swere. Hanwell, North Newington, A. Fr.
4. Ray. Near Heyford, Otmoor, *Rep. of Rec. Club*, 1881. Bayswater, planted commonly in Marston Meadow. Magdalen College Meadow.

5. *Isis*. Binsey, Foxcote, Christ Church Meadow, Wychwood, Eynsham.
Self-sown seedlings on mud dredged from river, Osney.
6. *Thame*. Cowley! *Bz.* Dorchester, Shotover.
7. *Thames*. In Park Corner.

Var. fastigiata. *The Lombardy Poplar.*

Alien. Only as a planted tree throughout the county.

* *P. balsamifera, L.* A North American tree, is occasionally planted in various situations in the county as at Park Corner near Nettlebed, The Parks, etc.

SALIX. L.

S. pentandra, L. *Bay-leaved Willow.*

Top. Bot. 23, apparently planted. Syme, E. B. viii. 202. 1303. Nym. 665.
Doubtful native. Hedges, streamsides. Very rare. Tree. May,
June.

First record, *Salix folio laureo seu lato glabro Odorato, Ray, Blackstone,*
1737.

4. *Ray*. A male tree in Oldbury Park near the spring, *W. Wilson Saunders*. Island in the Cherwell, *Dyer!* Banks of the Cherwell, *Bz.* in *Purton*.
 5. *Isis*. In Charlbury Lane near the Bridge, in Walcot Wilderness, and about Ascot Mill plentiful, *Blackstone MSS.* Christ Church Meadow, *Bz.*
- Northants, doubtful native. Warwick, marshy coppice near Farnborough.

S. fragilis, L. *Crack Willow.*

Top. Bot. 374. Syme, E. B. viii. 205. 1306. Nym. 664.
Native. Stream- and pondsides. Common. Tree. April, May.
First record, *Sib.* 1794.

2. *Ouse*. Near Mixbury and Ardley.
 3. *Swere*. Banbury, *A. Fr.* Burford.
 4. *Ray*. Marston, Rousham, Cherwell side near Oxford, principally female. One large hollow tree (male) near the Ferry Boat, *Mesopotamia*.
 5. *Isis*. Christ Church Meadow, *Bz.!* Godstow.
 6. *Thame*. Thame, *Hb. Bz.* Wheatley.
 7. *Thames*. Near Caversham.
- Berks. Bucks, Northants, Gloster, Warwick.

Var. Russelliana, Sm. *Bedford Willow.*

Syme, E. B. viii. 207. 1308.

3. *Swere*. Great Tew, *A. Fr.*
5. *Isis*. Cornbury, *T. Westcombe*.

Var. *S. decipiens*, Hoff. *Poplar Willow*.

Syme, E. B. viii. 205. 1307.

5. Isis. Cornbury, *T. Westcombe*. Godstow.

6. Thame. Christ Church Meadow, *Dyer* in *Journ. Bot.* vol. ix. Waterstock, *A. Fr.*

The tree in Christ Church Meadow, says *Bx.* in 1830, 'cannot be less than fifty years old and 50 feet high. The trunk near the ground measures 6 feet 10 inches in girth. Hoffmann first distinguished it as a species in 1785. The tree in Christ Church Meadow must, I think, have been growing there prior to that time.'

S. alba, L. *White Willow*.

Top. Bot. 375. Syme, E. B. viii. 211. 1309. Nym. 664.

Native. River- and poolsides, damp hedges, etc. Common, especially by the Thames and Cherwell. Tree. April, May.

First record, *Plot*, 1677, 'The Willow at Enstone was 50 feet high.'

At Ardley there is a fine tree of this species. There are some fine pollards along the Cherwell, which, with *S. fragilis*, have been well represented in Keeley Halswelle's pictures.

Var. *vitellina*, L. *Golden Willow*.

Syme, E. B. viii. 211. 1311.

4. Ray. Magdalen College Walk, *Sib.* species.

5. Isis. Christ Church Meadow.

7. Thames. Near Henley, *Sib.*

Planted near Oxford, but does not flourish.

Var. *caerulea*, Sm. Syme, E. B. viii. 211. 1310.

4. Ray. Cherwell side.

6. Thame. Waterstock, *A. Fr.*

* *S. Babylonica*, L. Not indigenous, occurs in parks, plantations, etc., as a planted tree. Near Magdalen Bridge, St. Mary Magdalen Churchyard, etc.

S. triandra, L. *French Willow*.

Top. Bot. 375. Syme, E. B. viii. 215. 1313. Nym. 664.

Native. Banks of streams, etc. Locally common. Tree or Shrub. April, May.

First record, *Sib.* 1794.

2. Ouse. Hethe.

3. Swere. Bretch, Hardwick Road, *A. Fr.*

4. Ray. Cherwell Banks! *Bx. in Purton*. Otmoor, Marston, Upper Heyford, Kidlington.

5. Isis. Wolvercote, Christ Church Meadow, Yarnton, etc.

6. Thame. Sandford, *Dyer* in *Hb. Br. Mus.*

Var. *Hoffmaniana*, Sm. Syme, E. B. viii. 215. 1314.

4. Ray. Otmoor, Cherwell side, Upper Heyford, Mesopotamia.

5. Isis. Christ Church Meadow, Woodstock Road, Bx. Common almost everywhere about Oxford, Walk.

6. Thame. Cowley Field, Prof. Daubeny. Thame, Hb. Bx. Bullingdon Green, Iffley Meadow! Bx. Do. Dyer in J. Bot. vol. ix. Sandford.

7. Thames. North Stoke.

Var. *amygdalina*, L. Syme, E. B. viii. 216. 1315.

4. Ray. Otmoor.

5. Isis. Near Godstow.

Var. *S. discolor*, Koch. Is not this identical with *triandra*?

4. Ray. Cherwell side, Oxford, Rev. J. E. Leefe.

* *S. undulata*, Ehrh. *S. lanceolata*, Sm.

Syme, E. B. viii. 1312.

4. Ray. Near Parsons' Pleasure, planted.

5. Isis. Planted in Christ Church Meadow, Bx.

S. purpurea, L. Bitter Willow. Purple Osier.

Top. Bot. 375. Syme, E. B. viii. 217. 1316. Nym. 665. Bx. 434.

Native. Septal. Hedges and brooksides. Rare. Tree or Shrub. March, April.

First record, Sib. 1794. *S. monandra*, Hoff.

3. Swere. Hanwell Road, etc., between Hardwick Road and Hanwell, A. Fr.

4. Ray. Marston, Mesopotamia, Cherwell side.

5. Isis. Christ Church Meadow, Bx. in Purton! Planted, as is the case with most of the willows growing there, Bx. MSS. Near Wolvercote.

6. Thame. Thames at Oxford, Winch. in New Bot. Guide. Near Sandford.

Berks. Near Kennington.

Var. *Kirkii* (?). Near Mesopotamia Ferry, planted.

Var. *S. Lambertiana*, Sm. Boyton Willow.

Syme, E. B. viii. 218. 1318.

7. Thames. At Harleyford near Henley, Sm. Eng. Fl.

Meadow west-by-north of Chazey Farm, west of Caversham, F. A. Lees.

Var. *S. ramulosa*, Borr. Rose Willow. *S. Helix*. Auct.

Syme, E. B. viii. 231. 1319, incorrect.

3. Swere. Near Banbury, A. Fr., also Bees.

4. Ray. Cherwell side, Otmoor.

5. *Isis*. Christ Church Meadow, *Bz.* Near South Hinksey, but in Oxon; Wolvercote.

Berks. Wargrave, *Melville*.

S. rubra, *Huds.* *Green Osier.*

Top. Bot. 375. Syme, E. B. viii. 221. 1320. Nym. 665.

Native. Riversides and wet places. Rather uncommon. Sh. April, May.

4. *Ray*. Marston.

5. *Isis*. Godstow, Wolvercote.

7. *Thames*. Bledlow, North Stoke.

Berks. Between Maidenhead and Windsor, *J. Sherard*. Given as if in Oxon in *Walk*. Pangbourne, *Brit.* Bucks, Northants, Warwick.

Var. *S. Forbyana*, *Sm.* Syme, E. B. viii. 222. 1322.

3. *Swere*. Banbury, *Bees*.

5. *Isis*. Godstow.

S. viminalis, *L.* *Osier.*

Top. Bot. 375. Syme, E. B. viii. 223. 1322. Nym. 666.

Native. Pondsides, marshes, wet meadows. Rather common. Shrub or small tree. April, May.

First record, *Sib.* 1794.

3. *Swere*. Banbury, *Bees*. Between Bloxham and Tadmarton, Great Tew, Grimsbury, *A. Fr.* Cropredy.

4. *Ray*. Marston Lane, Otmoor, Kirtlington, etc.

5. *Isis*. Bruern Wood, Godstow, Woodstock, etc.

6. *Thame*. Dorchester, Wheatley.

7. *Thames*. Caversham, Henley, North Stoke, etc.

Berks. Bucks, Northants, Gloster, Warwick.

S. stipularis, *Sm.*

Syme, E. B. viii. 224. 1323.

Osier-holt. Brooksides. Rare and probably introduced. A hybrid between *cinerea* and *viminalis*. Sh. March.

3. *Swere*. Banbury, *Bees*.

5. *Isis*. Christ Church Meadow.

S. Smithiana, *W.*

Syme, E. B. viii. 227. 1324. Nym. 666.

Native. Pond- and streamsides, wet places. Not uncommon. Shrub or Tree. April.

First record, *the Author*, 1880.

4. *Ray*. Marston.

6. *Thame*. Near Haseley.

Berks. Boar's Hill, Wootton. Northants, Gloster, Warwick.

[*S. acuminata*, Sm. To which has been referred (incorrectly) Sberard's '*Salix caprea acuto longoque folio*' frequently about Oxford. 'Tis not of young shoots but always so,' *Ray. Syn.* In the Dillenian herbarium it is represented by a *Caprea* form, not *acuminata* to which Walker refers it, and which has not been definitely recorded for the county. Sibthorp's *acuminata* was aggregate *cinerea*.]

***S. rugosa*, Leefe.**

Syme, E. B. viii. 228.

4. *Ray.* Common about Cherwell, *Bz.* Marston.

5. *Isis.* Christ Church Meadow, *Bz.*

6. *Thame.* Menmarsh Farm, *A. Fr.* Great Haseley.

***S. ferruginea*, Anders.**

Syme, E. B. viii. 228. 1325.

4. *Ray.* Gatherers by Cherwell, Oxford, *Hb. Br. Mus., Salic. Exs. Fasc. iii.* The Rev. J. E. Leefe informs me the Cherwell plant is true *ferruginea*, somewhat different from Andersson's plant.

5. *Isis.* Godstow.

6. *Thame.* Cowley.

Berks. Reading, *E. B. S.* *Warwick,* Northants.

***S. Caprea*, L. Sallow.**

Top. Bot. 376. Syme, E. B. viii. 233. 1331. *Nym.* 667.

Native. Woods, hedges. Common and universally distributed. Tree or Shrub. March, April.

First record, *Sib.* 1794.

In the Banbury list *S. sphacelata*, Sm. was included. Mr. Beesley now believes this to be a form of *caprea*.

Mr. G. D. Leslie considers this to be the most ornamental of the Thames Valley willows.

***S. cinerea*, Sm.**

Top. Bot. 375. Syme, E. B. viii. 231. 1327. *Nym.* 667.

Native. Woods, hedges, etc. Common and widely distributed. Shrub or Tree. April.

First record, *Sib.* 1794, sub nom. *acuminata*, Hoff.

Var. *aquatica*, Sm.

Syme, E. B. viii. 231. 1328.

3. *Swere.* Hardwick, *R. Fr.*

4. *Ray.* Common about Oxford, *Bz.* Otmoor, Magdalen College Grounds, Headington Wick Copse.

5. *Isis.* Handborough.

6. *Thame.* Riverside near Thame, *A. Fr.* Bullingdon.

7. *Thames.* North Stoke.

Var. *oleifolia*, Sm.

Syme, E. B. viii. 231. 1329.

6. Thame. Near Thame, *Hb. Bx.*

7. Thames. North Stoke.

Another form quite as distinct as the named varieties occurs in the pools at the bottom of Cornbury Quarry, its dark glossy leaves, with very glaucous lower side, at a distance suggest a *phylicifolia* variety. Rev. J. E. Leefe hardly considers it a *cinerea* form and yet cannot pass it as a *laurina* variety, its leaves being more obovate and silky than those of the latter plant.

S. aurita, L.

Top. Bot. 376. Syme, E. B. viii. 232. 1330. Nym. 667.

Native. Hedges, thickets, and damp woods. Not common. Shrub.

April, May.

First record, *Sib.* 1794.

2. Ouse. Ardley.

3. Swere. Hardwick Hill, *Bees.*

4. Ray. Noke.

5. Isis. Bruern Wood, Stonesfield, Wychwood.

6. Thame. Shotover! *Bx.* in *Purton.*

7. Thames. Nettlebed.

Berks. Bagley.

? *S. ambigua*, Ehrh.

7. Thames. A small bush on Nettlebed Common, with some amount of hesitation, I refer to this hybrid plant; *repens* does not occur in the vicinity. *Ambigua* was found on Napford Common, Bucks, *repens* not occurring.

S. repens, L. Heath Willow.

Top. Bot. 377. Syme, E. B. viii. 246. 1356. Nym. 668. *Bx.* 142.

Native. Ericetal. Heaths. Very rare or extinct. Shrub. March,

April.

First record, *Sib.* 1794. *S. depressa*, Hoff.

5. Isis. North Leigh Heath, *Sib.*

Walker gives it unlocalised, as if a common plant in Oxford.

Berks. Sunninghill, Greenham Common, *Brit.* Northants, absent.
Bucks, Gloster, Warwick.

* *S. nigricans*, Sm.

Top. Bot. [23]. Syme, E. B. viii. 241. 1347. Nym. 668.

South limit, in Surrey (?), Oxford (?), Hereford (?), *Cyb. Br.* 2. 397.

'Something has been recorded from Oxford as *nigricans*.' *Comp. Cyb. Brit.* 568. Mr. Watson's characteristic sentence does not quite accurately describe the record. The plant recorded was correctly identified. Its *indigenuity* was very doubtful.

4. **Bay.** Banks of Cherwell Christ Church Meadow, *Bz.* in *Purton* and *Walker*. Probably planted. Warwick.

* *S. Croweana*, *Sm.* Syme, E. B. viii. 238. 1337.

5. **Isis.** Christ Church Meadow, planted.

* *S. nitens*, *G. Anders.* Syme, E. B. viii. 238. 1336.

5. **Isis.** Christ Church Meadow, planted.

[*S. laurina*, *Sm.* Warwick.]

ORD. LXXII. BETULINEÆ, Bart.

ALNUS. *G.*

A. glutinosa, *G.* *Alder.*

Top. Bot. 372. Syme, E. B. viii. 178. 1294. Nym. 671. Bx. 193.

Native. Riversides, damp woods, etc. Rather uncommon. Tree. March, April.

First record, *Sib.* 1794, *Betula alnus*, L. Near Godstow, South Leigh Meadows.

Noted in all the districts except the Stour.

Baxter observed *Dofhidea alnea*, *Erysiphe penicillati*, var. *Alni*, on it in Christ Church Meadow and in Magdalen Walk, *Erineum Alneum*.

A fine tree of the cut-leaved Alder, *A. incisa*, Syme, is growing at Wolvercote. It was planted in 1800 by Wm. Cobbett. Small planted trees by the Cherwell side in the Parks.

BETULA. *G.*

B. alba, *L.* *Birch.*

Native (?) Heaths, woods on light soil. Rare. Tree. May.

First record, *Sib.* 1794.

Wm. Coles in *Adam in Eden*, 1657, says the Birch tree is very rare in some counties as in Northants and Oxon where they are set in gardens as rarities; and *Robt. Turner* in the *Botanologia*, 1664, also refers to its rarity here. The Birch is so frequently planted in Oxon that wild stations are difficult to discriminate.

B. pubescens, *Ehrh.*

Syme, E. B. viii. 186. 1296. Nym. 672.

5. **Isis.** Bruern Wood.

B. verrucosa, *Ehrh.*

Syme, E. B. viii. 182. 1295. Nym. 672.

First record, *the Author*, 1884.

5. **Isis.** Near Kingham.

[*Myrica Gale*, L. Old Windsor Park corner, *Park. Theat.* Broadmoor Bottom, Golden Gully near Newbury, *Brit.*]

ORD. LXXIII. CONIFERÆ, L.

JUNIPERUS. L.

J. communis, L. *Juniper.*

Top. Bot. 379. Syme, E. B. viii. 273. 1382. Bx. 431.

Native. Dry pastures and chalk downs. Locally common. Shrub. May.

First record, *Wm. Coles*, 1657.

Noticed also as an Oxford plant in *Turner's Botanologia*, 1664, and 'on many hills in Oxfordshire,' *Merrett*, 1667.

2. Ouse. Cottisford Heath, *Bees*.

3. Swere. Great Tew, *Bees*.

4. Ray. Heyford Leys, *T. Bees*. Bx. 1831. Middleton, *Rev. E. Fox*.
Some fine bushes over twelve feet high near the north termination of the Avesditch between Heyford and Middleton.

5. Isis. Abundantly on a common between Blenheim and Ditchley, *Mr. Woodward* in *Withering*.

6. Thame. Headington Quarry, *Bx*.

7. Thames. Bechentrete, Stokenchurch, *Coles*, 1657. Stokenchurch Hills, *Sib.* / Lewknor, Caversham, *A. Fr.* Kingston Hill, *Hb. Bx*. Goring, *Hb. Lawson*. Beacon Hill abundant, Grime's Dyke, Pyrtton Hill, Brightwell Downs, Swincombe Downs, Nuffield, Chinnor Hill, Penley Woods, very fine specimens.

Berks. Streatley Downs, etc. Bucks. Napford, etc. Northants, extinct. Gloster E. Warwick, absent.

TAXUS. L.

T. baccata, L. *Yew.*

Top. Bot. 380. Syme, E. B. viii. 277. 1384. Nym. 677. Bx. 222.

Native. Woods on chalky or calcareous soil. Planted elsewhere.

Tree. March, April.

First record, *Sib.* 1794.

2. Ouse. Ardley Wood, seedling.

3. Swere. Not wild, *T. Bees*. Wroxton, *Gull*. Tadmerton, Broughton, Adderbury, Great Tew, *A. Fr.*

4. Ray. Bousham.

5. Isis. Cornbury Quarries, *Sib.* / fine trees.

6. Thame. The large Yew at Iffley Church-yard is supposed to be as old as the Church itself, over 700 years. 'It is now, 1837, 22 feet high, the girth at 2 feet from ground 20 feet, diameter of head 25 feet.' Cuddesdon Church-yard, Waterstock, etc.

7. Thames. Goring, Watlington, between Christmas Common and Assenton, Checkenden, Penley Wood fine specimens, Whitchurch, splendid trees in Ipsden Woods. Native on the Chilterns.

Var. *fastigiata*, Lindl. *Irish Yew*.

Goring, *Hb. Br. Mus. col.* A. Dixon, not wild, and also as a planted shrub in many situations.

Berks. Bucks, native. Gloster W. Northants, alien. Warwick, alien.

* *Pinus sylvestris*, L. *The Pine Fir*.

Syme, E. B. viii. 264. 1380. Nym. 674. Bx. 389.

Alien. Occurs as a planted tree throughout the county.

* *Larix europæa*, D C. *Larch*.

Frequently planted, as about Tackley, Penley, Blenheim, Middleton, etc., and in Berks at Bagley Wood, etc.

CL. II. *MONOCOTYLEDONEÆ*.

ORD. LXXIV. *HYDROCHARIDEÆ*, DC.

HYDROCHARIS. L.

H. Morsus-Ranae, L. *Frog-bit*.

Top. Bot. 409. Syme, E. B. ix. 78. 1444. Nym. 678. Bx. 441.

Native. Lacustral. Ditches, pools, slow stagnant streams. Local. P. July, Aug.

First record, *Sib.* 1794.

4. Ray. Summertown, *J. Fr.* Otmoor, The Parks, Marston.

5. Isis. Port Meadow! *Hb. Lawson.* Oxford, *Rev. W. T. Bree* in *Purton*. Ditch Canalside, *H. Bos.* Ditches between Canal side and Port Meadow, Wolvercote, Binsey.

6. Thame. Stadhampton, *W. French.* Thame river, *Hb. Bz.* Christ Church Meadow! *H. Bos.* Nuneham.

7. Thames. North Stoke.

Berks. Kennington, Radley. Bucks, Northants, Gloster E., Warwick, absent. Mr. G. D. Leslie figures this on the title-page of 'Our River.'

* *Stratiotes aloides*, L. *Water Soldier*.

Top. Bot. [23.] Syme, E. B. ix. 80. 1445. Nym. 678. Bx. 413.

Alien. Planted in pond in Magdalen Meadow by Mr. Baxter! 1885, 'In the Isis near the Cottage, Nuneham Park,' Mr. Hewlett, *Walk. Fl.* It has no claims to be ranked as a native plant.

Berks. Nuneham, planted. Northants, wild, but now nearly or quite extinct.

ANACHARIS. *Rich.*

* **A. Alsinastrum**, *Bab.* *Canadian Water Thyme.*

Elodea canadensis, Mich. Syme, E. B. ix. 81. 1446. Nym. 678.

Colonist. Streams and ponds. Widely distributed, but much less abundant about Oxford than formerly, and still decreasing. P. July-Sept.

First record, *W. Baxter*, 1853.

'On taking a walk on Sunday, Aug. 28, 1853, across the meadow between St. Clement's and Iffley, I was surprised to find *Anacharis Alsinastrum* in a ditch in Long Meadow. It formed an uninterrupted dense mass from one end of the ditch to the other. Three or four years ago the plant was not known in a wild or even in a cultivated state, but about 1850 a small specimen was introduced into the lower aquarium of the Botanic Garden. It is also abundant in the ditches on each side of the Canal, Jericho to the railway, Port Meadow, also in the Isis close to the Railway Station. The plants in the Canal and Isis must have travelled out of Warwickshire.' *Bz. MSS.*, 1854.

2. **Ouse.** Hethe.

3. **Swere.** Cherwell, too abundant, *A. Fr.* Noticed there by *Mr. Beesley* in 1854. Clattercut.

4. **Ray.** Otmoor, Tackley Pond, Marston ditches and Cherwell, flowering freely, 1885.

5. **Isis.** Plentiful in ponds at Ditchley, flowering at Binsey and in Oxford Canal.

6. **Thame.** Long Meadow, 1854, *Hb. Bz.* Iffley, Shotover ponds.

7. **Thames.** North Stoke, Saunders' Green, and in many ponds on the Chilterns, doubtless introduced by birds.

The flowers break off and may be found floating on the water. This was very noticeable near Marston Ferry in 1885.

ORD. LXXV. ALISMACEÆ, *Rich.***BUTOMUS.** *L.*

B. umbellatus, *L.* *Flowering Rush.*

Top. Bot. 411. Syme, E. B. ix. 76. 1443. Nym. 678. Bx. 34.

Native. Stream- and brooksides. Locally common. P. June, July.

First record, *Sib.* 1794. Quæ Academiæ ipsius ambulacra præter fluunt flumina . . . *Butomo* inter se fere constipatis luxuriant.

3. **Swere.** Cherwell and Canal side, frequent, *Bees.* Neithrop, *A. Fr.*

4. **Ray.** Cherwell side about Oxford, *Bz.* Near Merton, *A. Fr.* Islip, *H. Bos.* Otmoor, abundant between Islip and Oddington.

5. **Isis.** Near Eynsham, Christ Church Meadow, pools on Botley Road, *Sib.* Cornbury Park, Blenheim Park, Osney, *H. Bos.* Medley, *W. Whitwell.* Charlbury, *J. M. Albright.* Evenlode side, near

Handborough railside, Port Meadow, at intervals in the river from Wolvercote to Kelmscott.

6. **Thame.** Thame, *Hb. Bx.* Iffley, etc., *H. E. Garnsey*. 'Near Abingdon we were gratified by finding this most elegant aquatic; clumps of which were constantly occurring where the water was shallow, either at the river side or in spots where the ground approached the surface in mid-stream. It is by no means common to all the banks of the Thames. We voyaged many miles on several occasions and sought for it in vain, finding it in great luxuriance in the river Thame between Dorchester and the junction.' *Hall's Book of the Thames*.

Berks. South Hinksey, Kennington, Reading, etc.

The lighter green of the leaves, which are also shorter and narrower, distinguishes this plant when not in flower from *Sparganium*. They are of a more yellow green than *Glyceria aquatica*.

ALISMA. L.

A. Plantago aquatica, L. *Water Plantain.*

Top. Bot. 409. Syme, E. B. ix. 70. 1437. Nym. 679. Bx. 337.

Native. Paludal. River- and streamsides. Common. P. June-Aug.

First record, *Sib.* 1794.

2. **Ouse.** Hethe.

3. **Swere.** Not common in Cherwell, *Gull*.

4. **Ray.** Oddington, Heyford, Marston, The Parks.

5. **Isis.** Bruern, Handborough, North Leigh, Osney, Port Meadow.

6. **Thame.** Tiddington, *A. Fr.* Thame, *Hb. Bx.* Albury, Iffley, Christ Church Meadow.

7. **Thames.** Ipsden, Ibstone, Caversham.

Var. *lanceolata*, With.

Syme, E. B. ix. 70. 1438.

4. **Ray.** Otmoor.

5. **Isis.** Port Meadow, see *Rep. of Rec. Club*, 1880, p. 150. Very typical in pond by Duke's Lock. Also with all the leaves reduced to phyllodia.

6. **Thame.** Oxford, Cowley, *W. Newbould*. Menmarsh Farm, *A. Fr.*

7. **Thames.** Caversham.

A. ranunculoides, L.

Top. Bot. 409. Syme, E. B. ix. 72. 1439. Nym. 679.

Native. Paludal. Marshes, ditches. Very rare or extinct. P. June-Aug.

First record, *Sib.* 1794.

4. **Ray.** Otmoor, *Sib.* Do. about 1860, *H. E. Garnsey*. Near Bicester, *T. Brayne*.

5. *Isis*. South Leigh, *Sib*.

6. *Thame*. Cowley, *Sib*. Left-hand side of Cowley Marsh, *H. Bos.* about 1864.

Berks. Bucks, Gloster E., near Kelmsford. Warwick, very rare.

[*Damasonium stellatum*, *Rich.* *Actinocarpus Damasonium*, R. Br., should be looked for in the pools on the Chilterns; it has been found in *Berks* on the Winkfield Plain, near Windsor; ditches about Southcote near Reading; and in Bucks on Napford Common.]

SAGITTARIA. L.

S. sagittifolia, L. Arrowhead.

Top. Bot. 410. Syme, E. B. ix. 71. 1436. Nym. 679. Bx. 109.

Native. Shallow streams. Common. P. July, Aug.

First record, *Gerarde*, 1597.

'*Sagittaria major*. Greate Arrowe Head and *Sagittaria minor angustifolia*, small narrow leaved Arrowe Head. These herbes do grow . . . in the ditches neere the walls of Oxford.' Also in *Gerarde Emac.* and *Merrett*, who describes it as *S. longissima cuspidate pedali*, Arrowhead with a leaf a foot or more long, 1666.

3. *Swere*. Cherwell and Canal, *Gull*. Twyford, Mill Meadow, *A. Fr.* Somerton.

4. *Ray*. Marston, *Hb. R. Linton*. Cherwell, *Hb. Lawson*. Oddington, Heyford, abundant in a pond on Otmoor.

5. *Isis*. Godstow, *W. Whitwell*. Bladon, Handborough, Port Meadow, abundant, Christ Church Meadow and westward to Kelmscott.

6. *Thame*. Thame, *Hb. Bz.* Dorchester, Sandford, etc.

7. *Thames*. Goring, Caversham, etc.

Sibthorp followed the old writers in separating a small leaved form (referred to by *Gerarde*) as *parvifolia*, and gives Dorchester as a locality; Baxter also found it in the Canal between Highbridge and Heyfield's Hut, and the same with a series of connecting links with the type may still be found about Oxford.

'This is one of the handsomest of British aquatics, whether as regards the elegant spear-shaped leaves of glossiest green, or the flower spikes rising in pyramidal form from the water with strong fluted stems, and presenting altogether a striking resemblance to a highly decorated gothic finial. This very graceful plant is found in abundance about Oxford, but there are few parts of the Upper Thames which it does not enliven by its luxuriant foliage.' *Hall's Book of the Thames*.

TRIGLOCHLIN. L.

T. palustre, L. Marsh Arrow Grass.

Top. Bot. 412. Syme, E. B. ix. 65. 1433. Nym. 680. Bx. 60.

Native. Uliginal. Marshes, wet meadows. Rather rare. P. June-Aug.

First record, *Sib.* 1794.

3. **Swere.** In a meadow near the Canal, quarter of a mile towards King Sutton, boggy field near Hanwell, *Gull.* Meadow South of Shutford Bridge, plentiful, *T. Bees.* Bretch, Bodicote, *A. Fr.*

4. **Ray.** Bog near Upper Heyford, *Bz.* Stow Wood, *H. Bos.* Headington Wick, Marston Fields, one specimen thirty-four inches high.

5. **Isis.** South Leigh Meadows, *Sib.* Canalside going to Wolvercote, also beyond Heyfield's Hut, *Bz.* 1831! 1884. Wolvercote, *H. E. Garnsey!* Binsey! Cornbury, Woodstock, *H. Bos.* Wychwood, *Daubeny*, 1842!

6. **Thame.** Bullingdon Green! Cowley Marsh! *Sib.* South side of Shotover! *Bz.* Albury, *Rev. F. Bennett!*

Berks. South Hinksey, Sandford, Radley, Tubney.

ORD. LXXVI. POTAMOGETONEÆ, Dmrt.

POTAMOGETON. L.

P. natans, L. *Floating Pond Weed.*

Top. Bot. 420. Syme, E. B. ix. 26. 1399. Nym. 681. Bz. 350.

Native. Ponds, ditches, streams. Common. P. June, July.

First record, *Sib.* 1794.

2. **Ouse.** Ardley.

3. **Swere.** Cherwell near Bridge, *Gull.* Somerton, Shutford.

4. **Ray.** Oddington, Bayswater, Cherwell frequent, Otmoor.

5. **Isis.** Eynsham, Wolvercote, Freeland, Ditchley, North Leigh, Bruern, Isis and Evenlode, Wychwood, pond near Duke's Lock.

6. **Thame.** *Hb. Bz.* in Thame. Waterstock, *A. Fr.* Albury.

7. **Thames.** Nettlebed, Binfield, Woodcote.

Berks. Marcham, Hinksey. Bucks, Northants, common. Gloster E., Kelmsford, Lechlade. Warwick.

P. polygonifolius, Pourr.

Syme, E. B. ix. 27. 1400. Nym. 681. *P. oblongus*, Vir.

Native. Ponds and boggy heaths. Rare. P. July.

First record, *Dillenius*, 1744.

3. **Swere.** Cherwell near Banbury, *A. Fr.* Somerton.

4. **Ray.** Near Oxford, *Hb. Lawson*, 1869. Kirtlington.

6. **Thame.** 'North side of Shotover Hill in a small boggy piece of ground a little before the enclosed ground begins I found it in July without flower, 1744, Ray says it flowers in June,' *D. Dillenius*, MSS. The plant is the heath form *P. ericetorum*,

Syme. In 1885 I noticed the floating form in a small pond near the brickyards, which now probably occupy the old station, and a month later these being dried up the plant assumed the heath form.

7. **Thames.** Binfield Heath, very rare, see *Rep. of Rec. Club*, 1883.

Berks. South Hinksey. Northants, Gloster W., Warwick.

P. rufescens, *Schrad.*

Syme, E. B. ix. 30. 1402. Nym. 681.

Native. Slow streams and ponds. P. July.

First record, *T. Bees.* and *A. French*, about 1860.

3. **Swere.** Back brook Huscott Mill. Ditch near Grimsbury Green, ? if in Northants. This is the *P. protens* var. *b. heterophyllus* of the Banbury list.

5. **Isis.** Wychwood Ponds, *Rev. E. Fox.*

Berks. Hampstead Park. Bucks, Warwick.

? **P. gramineus**, *L.* *P. heterophyllus*, *Schreb.*

Top. Bot. 418. *Bees. Cat.* Syme, E. B. ix. 35. 1406.

Native (?) River, canal. Rare, ? if ever found.

3. **Swere.** [River in Mill Meadow, *Bees. List*], see above, Canal above Heyford, *Rev. E. Fox.* I have not seen specimens, in absence of these the record must be queried, although there is no intrinsic reason why this plant should be absent from Oxfordshire.

Berks. Bulmersh Lake, *F. Tufnail.*

P. lucens, *L.*

Top. Bot. 417. Syme, E. B. ix. 38. 1408. Nym. 682.

Native. Lacustral. Rivers, canal, ponds. Common in all the districts. P. June, July.

First record, *Sib.* 1794.

It is an abundant plant of the Thames, and gradually merges into the var. *P. acuminatus*, *Schum.* *Comp. Cyb.* 583.

4. **Ray.** Islip, Marston, the Parks.

5. **Isis.** Eynsham, Chinnor, Yarnton.

6. **Thame.** Dorchester, Iffley.

In the Cherwell some plants approaching *Zizii* occurred with the type.

P. decipiens, *Nolte.*

Syme, E. B. ix. 39. 1409. Nym. 682.

Native. Canal. Very rare. P. July.

First record, *the Author*, 1884.

4. **Ray.** Floating specimen in Canal, Upper Heyford, not the typical broad leaved Continental form, but the narrow leaved plant.

Gloster, Warwick.

P. praelongus, *Wulf.*

Top. Bot. 419. Syme, E. B. ix. 41. 1411. Oxford. Nym. 682.

Native. Lacustral. Rivers. Locally common. P. May.

First record, *W. Baxter*, about 1840, sub nom. *lanceolatus*.

6. **Thame.** River Thame, '*lanceolatus*' *W. Bz.* Oxford, *Hb. Br. Mus.* 1847. Sandford Lasher, *W. T. Dyer, Hb. Br. Mus.* and *Journ. Bot.* vol. ix. p. 148. Abundant in stream from the new boat house to Sandford, and at intervals southwards.

7. **Thames.** Near Caversham Bridge, *Supp. E. Bot.* Moultsford.

Berks. Canal at Marcham, Moultsford, Caversham. Northants, absent from Bucks, Gloster, or Warwick.

P. perfoliatus, L.

Top. Bot. 417. Syme, E. B. ix. 42. 1412. Nym. 682.

Native. Lacustral. Ponds, rivers, ditches, canal. Common. P. July. Occurs in all the districts.

First record, *Sib.* 1794.

A form with shorter leaves was noticed between Eynsham and Shilford.

P. crispus, L.

Top. Bot. 416. Syme, E. B. ix. 43. 1413. Nym. 682.

Native. Ponds, streams, and ditches. Common. P. June, July.

First record, *Sib.* 1794.

3. **Swere.** Canal, Wroxton Pond, *Gull.* Banbury, Twyford, Hardwick, Adderbury, *A. Fr.* Clattercut Reservoir, abundant.

4. **Ray.** Marston, Heyford, Islip.

5. **Isis.** Christ Church Meadow, *Sib.* Eynsham, Oxford Canal.

6. **Thame.** Cuttle Brook, Thame, *Hb. Bz.* Menmarsh Farm, *A. Fr.* Sandford, *Hb. Lawson.* Ifley, etc.

7. **Thames.** Caversham.

Var. *P. serratus*, Huds.

3. **Swere.** *Crispus*, a small state with less crisped leaves, Kilby's Meadows, *Bees.*

4. **Ray.** Plentiful in ditches about Marston.

5. **Isis.** Near Botley, Eynsham.

7. **Thames.** Whitchurch, see *Rep. of Rec. Club*, 1881. Woodcote, Hollindridge Farm, Saunders' Green.

Clusius' figure in Johnson's *Ger. of crispus* is annexed to a description of *densus*.

P. densus, L.

Top. Bot. 412. Syme, E. B. ix. 44. 1414. Nym. 682.

Native. Shallow streams. Not uncommon. P. June, July.

First record, *Sib.* 1794.

2. **Ouse.** Hethe.

3. **Swere.** Broughton Jack Brook, Wroxton, Neithrop, Drayton, *T. Bees.* Somerton, Tadmarton.

4. **Ray.** Bicester, Blackthorn, Headington Wick, Kidlington.
5. **Isis.** Christ Church Meadow, *Hb. Bx.* Canal, *H. Bos.* Binsey, Port Meadow, Wychwood, Minster Lovell, North Leigh, a very large form in river near Tumbling Bay Oxford, Bampton, Clanfield.
6. **Thame.** Cowley, Thame, *Bx.* Oxford.
7. **Thames.** Caversham.

Berks. Frilford, Ferry Hinksey.

This plant varies much in size, being sometimes so dwarfed as to appear like *Elodea*.

P. compressus, L. (*non Sm.*) *P. zosteræfolius*, Schum.

Top. Bot. 415. 'Warren.' Syme, E. B. ix. 46. 1415. Nym. 683.

Native. Canals and rivers. Local. P. June-Aug.

First published record, *Prof. Lawson*, 1870. Mr. Westcombe found it about 1850.

3. **Swere.** Hardwick Canal, Bodicote, *A. Fr.* Neithrop, Walford.

4. **Ray.** Kirtlington Canal.

5. **Isis.** Canal Oxford, *Rev. R. Linton*! Near Fawler, *T. Westcombe*.

6. **Thame.** Isis at Oxford, *M. A. Lawson*, *Journ. Bot.* ix. 16! Sandford, *Hb. Lawson*! Nuneham, *H. Bos.* 'gramineum.' Iffley, just below the Mill, fruiting freely.

Berks. Marcham, Sandford. **Bucks.** Northants, Warwick.

Dr. Trimen suggested the above was *Sibthorp's P. gramineum*, but I believe that to be *P. Friesii*.

[*P. obtusifolius*, *M. K.*

Top. Bot. 415. Oxford. Syme, E. B. ix. 48. 1417. Nym. 683.

Berks (?). Northants, Wakefield Pond. Gloster E. (?). Warwick.

I know of no Oxford locality or record, although it is likely to occur.]

P. Friesii, *Rup.* *P. mucronatus*, Auct.

P. gramineum, (L.) Sib. *P. compressus*, Sm. non L.

Top. Bot. 214. Syme, E. B. ix. 49. 1418. Nym. 683.

Native. Ponds, canal, shallow streams. Locally common. P. July.

First certain record, *the Author*, see *Rep. of Rec. Club*, 1880; but it is probably the *gramineum* of Sib. and *compressus* of Beesley and Walker.

3. **Swere.** Broughton Moat, Canal! brook between Cherwell and Canal, river in Mill Meadow (entered as *pusillus* in Banbury list), *T. Bees.* Canal Somerton, etc.

4. **Ray.** Kirtlington, and common on the shallow margin of Canal.

5. **Isis.** Binsey Common! ditches by the roadside going to Port Meadow, *Sib.* 'gramineum.' Canal between Oxford and Wolvercote, see *Rep. of Rec. Club*, 1880. Osney.

6. **Thame.** Between Oxford and Iffley.

7. **Thames.** Moulsoford.

Berks. Marcham. **Bucks.** Gloster E., Northants, Warwick.

P. pusillus, L.

Top. Bot. 414. Syme, E. B. ix. 50. 1419. Nym. 683.

Native. Streams, ditches, ponds. Not common. P. June, July.

First record, *Sib.* 1794.

3. **Swere.** Brook between Cherwell and Canal, between Banbury and King Sutton, *T. Bees*. Cherwell, towards Franklin's Knob, *A. Fr.* Somerton.

4. **Ray.** Kirtlington.

5. **Isis.** Port Meadow, *Sib.* Ponds at Burford Priory, Wolveroote, *H. Bos.* River near Bruern Abbey, Canal near Wolvercote, Bampton, Osney.

6. **Thame.** Below Iffley Mill.

Berks. Frilford, Iffley, and all the border counties.

P. pectinatus, L.

Top. Bot. 413. Syme, E. B. ix. 52. 1422. Nym. 683.

Native. Ponds, canals, rivers. Common in all the districts except the Stour. P. July, Aug.

First record, *Sib.* 1794.

P. junceus, K.

P. flabellatus, Bab. *P. zosteraceus*, Bab. non Fries.

Syme, E. B. ix. 52. 1421.

Native. Rapid flowing streams. Locally plentiful. P. July.

First record, *D. Thorp* in *Hb. Sherard*, without date; first certain record, *T. Beesley*, 1851.

3. **Swere.** Canal towards King Sutton, *P. zosteraceus*, 1851, seen floating in Canal at Hardwick, also plentiful in brook Hardwick Road, *Bees*.

4. **Ray.** Kirtlington, Heyford.

5. **Isis.** Port Meadow, see *Rep. of Rec. Club*, 1880. River above Medley, *B. King!* Very fine, abundant hence to Kelmscott, flowering freely.

6. **Thame.** Iffley, Sandford, etc.

7. **Thames.** Sonning, etc.

Berks. Thames from Tadpole downwards. Bucks, Northants, Gloucester E., Warwick.

This may be the Pondweed referred to by Merrett, 1666, *Potamogeton Pusillum folio gramineo, caule rotundo* in Thames near Oxford, C. C.

ZANNICHELLIA. L.**Z. palustris, Fr.**

Z. major, Boen. *Z. brachystemon*, Gay.

Top. Bot. 423. Syme, E. B. ix. 56. 1425. Nym. 684. Bx. 164, not typical.

Native. Streams and pools. Local. P. May-Aug.

First record, *Sib.* 1794.

3. **Swere.** Hanwell Heath, Shutford Bridge, ditch beyond Cemetery, Banbury, *T. Bees.* Hardwick, *A. Fr.* Clattercut, Banbury.

4. **Bay.** Between Headington and the Wick! *Sib.* Marston, Bayswater, Bioester, pond in Elsfield Meadow, Otmoor.

5. **Isis.** Minster Lovell, Clanfield.

6. **Thame.** Stream that divides Cowley Marsh from Bullingdon Green, *Bz.* in *Purton.* Stanton Quarries.

Anthers two-celled; leaves dark green, broader and stouter than in next plant.

Berks. Bucks, Northants, Gloster E., Warwick.

Var. *Z. macrostemon*, Gay.

5. **Isis.** About Oxford, see *Rep. of Rec. Club*, 1880, *the Author*.

6. **Thame.** About Oxford, see *Rep. of Rec. Club*, 1881, *fide Arth. Bennett*.

A much more branching plant than *eu palustris*, with narrower leaves, and four-celled anthers.

Berks, Bucks, Northants. See *Rep. of Rec. Club*, 1880.

Z. repens, *Boen.* Reich, Exc. 502.

Native. Shallow streams. Very rare. June-Aug.

First record, *the Author*, 1883, and first as British.

5. **Isis.** Stream by roadside between Witney and North Leigh
Common. Sandy margin of river between Osney and Folly Bridge.

ORD. LXXVII. ORCHIDEÆ, L.

CEPHALANTHERA. *Rich.*

C. pallens, *Rich.* White-flowered Helleborine.

C. grandiflora, Gray.

Top. Bot. 386. Syme, E. B. ix. 130. 1485. Nym. 687.

Native. Rare in coppices on the great oolite. Common in woods on the chalk, except where the chalk is overlaid with tertiaries. P. May, June.

First record, *Helleborine flore albo*. 1677 *Ray's Cat. Pl. Ang.* 339 or *Merrett*, 1667.

'*Helleborine flore albo vel Damasonium montanum latifolium*, C. B. B. In sylvis montosis et cretaceis circa Stokenchurch agri Oxoniensis et in toto montium tractu Henley oppidum attingente Maio florens invenitur hæc elegans planta,' *Bobart*, 1699.

3. **Swere.** Narrow Beech Spinney near Farnborough just in Oxon, *W. Patey*.

4. **Ray.** Middleton Park, *Rev. E. Fox.*
5. **Isis.** Near Sarsden Pillars, *T. Bees.*
6. **Thame.** Shotover Plantation, *Sib. Serapias grandiflora.*
7. **Thames.** Stokenchurch, *Ray's Cat. Syn.* ed. i. ii. iii., *Gough, Martyn*, etc. Henley, *Morison.* Goring, *Hb. Lawson.* Maple Durham, *H. Trimen, Hb. Br. Mus.* Penley Wood, Chinnor. Very fine in Aston Wood, near Witchurch, Swincombe.

Merrett, 1667, mentions *Helleborine nervo medio candido*. In Stokenchurch Meadows, *Mr. Witham*. *Lusum esse naturæ non sine ratione suspicor.*

Berks. Wytham! Unwell Wood, Basildon, etc. Bucks, Northants, Gloster E.

The bluish-green foliage and yellowish-white flowers offer a striking contrast to the yellowish-green translucent leaves and pure white flowers of the next species.

C. ensifolia, Rich. *Sword-leaved Helleborine.*

Top. Bot. 386. Syme, E. B. ix. 129. 1484. Nym. 687.

Native. Open bushy places on the chalk. Very rare. P. May, June. First record, *E. M. Cox* in Top. Bot. 1874.

7. **Thames.** Chinnor Hill. It flowers earlier than *pallens* and chooses more open situations. It is singularly restricted to a piece of ground about an acre in extent on the summit of the lower chalk.

Gloster E, Warwick.

[*C. rubra, R.* Gloster E.]

EPIPACTIS, Rich.

E. palustris, Cr.

Top. Bot. 385. Syme, E. B. ix. 127. 1482. Nym. 688. Bx. 319 from a Weston Peat Pit plant.

Native. Uliginal. Marshes and bogs. Local. P. July, Aug.

First record, *O. sive serapias candido flore* two miles from Oxford, from Friar Bacon's study, *Merrett*, 1666.

4. **Ray.** Stow Wood, *Sib.*! Weston Peat Pits, an interesting variety with large flowers and pale-green stamens, bractæas, and calyx growing in the wet parts of the pits, *W. Wilson Sanders*! Headington Wick, *H. Bos.*! Kirtlington.

5. **Isis.** Combe, *Sib.* Between Church Handborough and Freeland, *Bx.*

6. **Thame.** Bullingdon Green, *H. Bos.* probably *Merrett's* locality! North side of Shotover, *Sib. Serapias longifolia*, L.

[7. **Thames.** In the woods Stokenchurch, *Hudson*, error, *Cephalanthus pallens* was intended.]

Berks. Between the old and new road going to Eynsham, *Bx.* Frilford.

It occurred with pure white flowers at Headington Wick.

Merrett's Berkshire record is *Helleborine multicaulis radice perplexa*.
By Cumnor Wood, *Mr. Pink*, 1667.

Bucks, Northants, Wittering, etc. Warwick extinct.

H. latifolia, *All.* (Aggregate.)

Top. Bot. 383. Syme, E. B. ix. 124. 1480. Nym. 688.

Native. Woods. Rather rare. P. Aug.

First record, *Plot*, 1677.

2. Ouse. Mixbury, *R. C. Pryor*.

3. Swere. Hanwell Oak Plantation, *T. Bees*, and adjoining Plantation,
R. Fr. 1863. Great Tew, Hanwell, Milton, *A. Fr.* Wroxton, *Bees*.

4. Ray. Steeple Aston, *Rev. E. Fox*.

5. Isis. North Leigh, *Sib.* Sarsgrove, *Bees*. Between Chipping
Norton and Shipton, *A. Fr.*

6. Thame. Shotover, a variety with smooth germen and entire lip,
plant two or three feet high, with thirty-two flowers, *Bz.*
Nuneham, *H. Bos.*

7. Thames. Between Fawley Court, Bix Brand, and Henley, *Bz.*
Stokenchurch, *Sib.* Nettlebed, Mongewell.

Berks. Bagley, *Bz.*

I have seen no specimens which I should refer to *eu latifolia* in Oxfordshire or Northamptonshire. *Media* appears to be the form to which the greater number of our plants should be referred.

H. violacea, *Bor.* Syme, E. B. ix. 123. 1481.

Native. Open places in woods or wood borders. Rare. P. Aug.

First record, *Plot*, 1677.

7. Thames. Side of Cowleaze Wood, near Shirburn Wood, Wood near
Stoke Row.

Northants.

Plot writes of *Epipactis*—‘The plants which Ray doubts whether specifically distinct are also Helleborines, the one his *flore atro rubente*, the other *H. latifol. montan.* Cat. pl. Ang., whereof the former has small narrow leaves, somewhat like *palustris*, and growing thicker on the stalk, whereas those of the latter are broad and much thinner; the one also flowers a full month after the other, though not so signally differing in the flower as Mr. Ray owns his to do, our *latifol. mont.* coming nearer to that of Gerarde than of Ray or Dodonæus, having purple flowers as deep or deeper than those of the *H. flore rubente*.’

H. media, *Bab.* Reich. D. Fl. tab. 486, 487.

Native. Woods. Local. P. Aug.

4. Ray. Headington Copse, Stow Wood, *H. Bos.*

5. Isis. Wychwood, *H. Bos.*

6. **Thame.** Nuneham, *H. Bos.* North side, Shotover! Clifton Hampton, *Rev. F. Bennett.*
7. **Thames.** Nettlebed, *A. Fr.* Stokenchurch Wood, see *Rep. of Rec. Club*, 1880. Mongewell.
- Berks.** Bisham Woods, *Brit.* Unwell Wood, *Rep. of Rec. Club*, 1882. Bucks, Northants, Gloster E.

NEOTTIA. L.

N. Nidus-avis, *Rich.* *Bird's-nest Orchis.*

- Top. Bot. 382. Syme, E. B. ix. 121. 1478. Nym. 688. Bx. 357, from
 a Stokenchurch specimen.

Native. Woods chiefly of beech or hazel. P. May, June.

First record, *Merrett*, 1666. *O. abortiva russa.*

2. **Ouse.** Near Stoke Lyne, *Mrs. Gough.*

3. **Swere.** Swerford Park, *Mrs. Davis*, also *Rev. E. Foz.*

4. **Ray.** Marston Copse, *T. Thurland.* Headington Copse, *H. Bos.* Beckley Wood, *Rev. F. Smith.* Wood near Oxford, *Bree* in *Purton.*

5. **Isis.** Blenheim Park Plantation and Bladon Heath, *G. Coles, Esq.* Tar Wood, *Sib.* Ditchley Wood, Lees Rest Wood, Wychwood.

6. **Thame.** Nuneham, *A. Fr.*

7. **Thames.** In the woods and grounds by Stokenchurch, *Mr. Witham* in *Merrett*, *Ray Syn.*, *Bobart* in *Morison, Sib.*, etc. Woods near Maple Durham and Straw Hill, *Mr. A. R. Birt*, 1839. Beech Wood, Maple Durham! *Hb. Br. Mus. Coll. H. Trimen.* Near Whitchurch! *A. Irvine.* Goring, *Hb. Lawson.* Swincombe, Henley, *H. Bos.* Whitchurch, Chinnor, Crowell, Aston, Cowlease, Penley Woods.

Berks. Bagley, Wytham, Cumnor, Streatley, Basildon, etc.

LISTERA. Br.

L. ovata, *Br.* *Twayblade.*

Top. Bot. 383. Syme, E. B. ix. 120. 1477. Nym. 688.

Native. Woods and marshes. Common. P. May-Aug.

First record, *Sib.* 1794. *Ophrys ovata*, L.

1. **Stour.** Tadmarton Heath Plantation, *T. Bees.*

2. **Ouse.** Ardley.

3. **Swere.** Hanwell Oak Plantation, Wroxton, Swerford, Broughton, Williamscoot, Cockly Brake, *T. Bees.* Bloxham, Great Tew, Causeway, *A. Fr.*

4. **Ray.** Stow Wood, *Sib.* Noke, *H. Bos.* Headington Wick Bog, Piddington, Heyford, Middleton Park, Kirtlington, etc.

5. **Isis.** South Leigh, *Sib.* Ditchley, *H. Bos.* Wychwood, **Minster** Lovell, Woodstock, Handborough, Charlbury, Kalmascott.

6. Thame. Shotover, *Sib.* Studley, Nuneham, Bullingdon Bog.
 7. Thames. Stokenchurch, *Hb. Bz.* Chinnor, Whitchurch, Cowleaze Wood, Penley Wood, etc.
- Berks. Bagley, Wytham, Boar's Hill, etc.

SPIRANTHES. *Rich.*

S. autumnalis, *Rich.* *Lady's Tresses.*

Top. Bot. 381. Syme, E. B. ix. 115. 1472. Nym. 689. Bz. 63.

Native. Pascual. Pastures and heathy places. Very rare. P. Aug.

First record, *Sib.* 1794. *Ophrys spiralis*, L.

3. Swere. Swerford, *Mrs. Davis.*

6. Thame. South side of Shotover Hill, *Sib.* Dry bank on left-hand side of road going to Shotover from Cheney Lane, *J. Benwell*, 1810. Wet place on south side of Shotover, near a spring opposite the foot-path to Bullingdon Green, *Bz.* 1833.

Berks. Hampstead Park, *Bz.* Streatley, *Pamplin.*

ORCHIS. (*L.*) *Rich.*

O. militaris, L. *Soldier Orchis.* *O. Rivin*, G.

Top. Bot. 388. Syme, E. B. ix. 94. 1452. Nym. 688.

Native. Chalk woods in Thames district. Very rare. P. Last week of May and first week in June. Almost extinct.

First record, *Merrett*, 1666. *O. stratemmatica major*, and first as British.

7. Thames. In Stokenchurch Woods, *Mr. Witham* in *Merrett*. Caversham Hill by the Thames side, *Ray's Cat. Orchis galea et alis fere cinereis*, J. B. Maio mense floret et in tota montium catena intra pagum Stokenchurch dictum, Henley et Readingum non raro occurrit. [In latomia vetusta ultra Hinksey haud longe ab Oxonio etiam reperitur.] *Bobart's Morison*, iii. 484. Caversham Hill, *Ray's Ed.* i. ii. iii. Specimens in *Herb. Dill and Bobart*, included *Simia* and *militaris*; also in *Huds. Fl. Ang.* Caversham Warren, *Sib.* Penley Hangings, *Dr. Williams Sm. Eng. Fl.* Woods between Fawley Court and Bix, about one-and-a-half mile from Henley, *Prof. Daubeney* and *Baxt.* Near Henley, old specimen in *Hb. Lawson.* Stokenchurch Hill, *W. Christie*, 1832. Fawley, *Daubeney* and *J. Woods.* ? if in Bucks. Wood near Henley, *Hb. Bz.* In several places between Goring and Whitchurch, *Syme.*

I have found it during the last four years very sparingly between the extreme localities given above. It only appeared in a barren state in 1885.

Berks. Reading, *Morison* (?) Bisham Wood, Streatley, Pangbourne,

Eng. Bot. Hinksey, Morison (?) *ustulata* probably. Bucks, Loudwater, Fawler. Herts.

O. Simia. Lam. *Monkey Orchis.*

O. tephrosanthos, Vill. *O. macra*, Lind.

Top. Bot. 388. Syme, E. B. ix. 96. 1453, not very good. Nym. 690. Bx. 213, from a Maple Durham specimen.

Native. Woods on the chalk downs. Extremely rare. P. Second and third week in May. Nearly extirpated.

First record, some specimens of the flowers only in the Dillenius herb., collected about 1740, but not distinguished there from *militaris*.

7. Thames. Caversham Hill, *Sir Joseph Banks*, 1778, in *Hb. Br. Mus.*; also 1796, *Mr. Lamb*, an unpublished sketch in Sowerby apparently made from this specimen. Also col. *J. Bicheno*, see *Trans. Linn. Soc.* 1818. Among bushes on the rising ground to the west of the great chalk-pit near Caversham, facing the Thames, *J. Bicheno*. On Ridgeway Hill, Maple Durham, *Dr. Lamb* in *Walk.* Caversham chalk-pit, May 22, 1835. Fir Copse and Straw Hill, Maple Durham, *E. Witts, Esq., Bx. Br. Pl.* Baxter says he and Mr. Witts compared a series of *O. militaris* and *Simia* brought in flower from Goring, and they were able to trace a regular gradation from the broad, dilated rounded lobes of *militaris*, to the long narrow strap-shaped ones of *tephrosanthos*. From this circumstance he was inclined to believe that they constituted only one species; *Bx. Pl.* 213. It varies with white flowers, and Sir W. J. Hooker says that some specimens communicated by Mr. Bicheno had the flowers with two spurs, two opposite horizontal lips, and two opposite sepals. Edges of fields between Goring and Maple Durham. Babington says, 'Helmet dark purple;' it was pure white in all the specimens found. Neither this nor *militaris* appears now to grow in the vicinity of Caversham, *J. T. Syme, Phyt.* iv. 861.

In the *Second Edition of Syn. of Brit. Fl.*, Dr. Lindley says, 'I have no doubt of this (the Oxon plant) the *O. tephrosanthos* of Bicheno being altogether distinct from the species so called by continental writers. It is true that *militaris* and *tephrosanthos* are so very variable in the form of their lip that it is a matter of some doubt whether they are distinct from each other, but the characteristic marks of *O. macra* are quite of another kind; independent of its more slender habit, narrow few flowered spikes and bluntish leaves, it is quite remarkable for the exceedingly large cells of the tissue of lip which project and have a watery appearance as if the whole surface were covered with crystalline warts, the lip is moreover destitute of the hispid line which invariably runs through its centre in all the varieties of either *O. militaris* or *tephros* I have examined. I have not met with this species in Continental collections.'

Baxter says, 'A living specimen agreed precisely with the above description of Dr. Lindley's.'

Notices of *O. Simia* occurring in Oxford may be found in almost all botanical works.

Mr. Pamplin informs me, 'This plant, as well as *militaris*, was tolerably plentiful about Whitchurch till 1837. About 1838 or 1839, when going over the ground late in the summer, I was grieved and horrified to see the steep slopes pared and burnt in order to enrich the land with the ashes, and so I actually witnessed the roasting alive of both Soldier and Monkey Orchis.' Whitchurch, 1881, see *Rep. of Rec. Club*, 1881. Druce.

The plant has now become exceedingly scarce, not so much from the depredation of collectors, as from the fondness of rabbits for it and changes brought about by agriculture. This year, 1885, one specimen flowered, but it was small and nibbled by slugs. *Simia* flowers a full week earlier than *militaris*, and, despite the intermediate forms that occur, they are in my opinion distinct, but the decrease of both species has prevented me from examining a large series. Where *Simia* alone occurred, i. e. at some distance from *militaris*, it appeared constant. In a locality where both species were present in a rather limited area, *Simia* became somewhat changed in the direction of *militaris*. This intermediate form may be the *Simio-militaris* of G. Grenier. Mr. Nicholson informed me he examined a large series of both plants in France and found they were completely joined by intermediates. The types when seen separately are very dissimilar.

Since writing this I see that Dr. Boswell in *E. Bot.* says that 'towards Goring both species grow together and intermediates occur, which I believe are of hybrid origin. I have seen none of these intermediates near Pangbourne, where *O. militaris* alone grows; nor between Maple Durham and Caversham, where *O. Simia* occurs without *militaris*.'

Berks. Streatley, Pangbourne; I am afraid extinct here; I saw a barren plant in 1878. Merrett's Wallingford plants I should think belong to *militaris* and *Habenaria viridis*. The latter has been usually referred to *Aceras*. Kent.

***O. ustulata*, L. Dwarf Orchis.**

Top. Bot. 388. Syme, E. B. ix. 93. 1450. Nym. 691.

Native. Pascual. Dry, chalky, and limestone pastures. Very rare. P. June-July.

First record, *O. sive Cynosorchis minor pannonica*, Ger. Bobart, 1699.

3. Swere. King's Mill Valley, T. Brayne MSS. 1820.

5. Isis. Southcomb near Chipping Norton, T. Bees. Burford Downs, Sib.

7. Thames. Thames side near Reading plentifully, Bobart. Caversham Hill in plenty, about half-a-mile west of Caversham Church,

1770, *Dr. Lightfoot MSS.* Caversham Warren, *Sib.* 1794. Chinnor Hill, *Rev. B. D'Oyly Aplin.*

Berks. Childswell Farm, *Merrett.* Between Eynsham Road and Abingdon, *Walk.* Plentiful on Streatley Hill. This may be *Bobart's militaris.* Northants, *Gloster E.*

O. Morio, L. *Green-winged Orchis.*

Top. Bot. 387. Syme, E. B. ix. 96. 1454. Nym. 691.

Native. Pascual. Meadows and pastures. Locally abundant. P. May.

First record, *Sib.* 1794.

3. **Swere.** Hanwell; behind Keeper's Lodge. Wroxton; between Bloxham Grove and Adderbury, *T. Bees.* Tadmarton, Hardwick, *A. Fr.*

4. **Ray.** Abounds in Oldbury and Kirtlington Park! *W. Wilson Saunders.* Elsfield, Water Eaton, *H. Bos.* Noke Meadows, Stow Wood.

5. **Isis.** Bladon, *H. Ridley.* Woodstock, *Rogers.*

6. **Thame.** Shotover, *H. E. Garnsey!* Nuneham, *H. Bos.*

It varies in colour from pure white to darkest purple.

O. latifolia, L. *Marsh Orchis.*

Top. Bot. 389. Syme, E. B. ix. 101. 1458. Nym. 692.

Native. Uliginal. Marshes and wet meadows. Local. Rather rare. P. June.

First record, *Sib.* 1794. (Aggregate.)

3. **Swere.** Bodicote Mill, canalside near the brick bridge towards King's Sutton, *Gull.* Between Bodicote and canal, Broughton, Drayton, meadow toward King's Sutton, *T. Bees.* Hanwell Spinney between Milton and Bloxham, *A. Fr.*

4. **Ray.** Headington Wick, *H. Bos.* Stow Wood, *W. Whitwell.* Marsh between Kirtlington and Tackley.

5. **Isis.** Blenheim, *F. Rogers.*

6. **Thame.** Dorchester, *Rev. F. Bennett.* Shotover, see *Rep. of Rec. Club*, 1880.

7. **Thames.** Nettlebed Wood, *A. Fr.*

Berks. Kennington, Frilford, etc. Bucks, Northants, Warwick.

Mr. Newbould says the Bullingdon plant may be *angustifolia.*

The spotless-leaved form is also frequent. The plate in Sm. Eng. Fl., 2308, ed. i., represents the purple-flowered form of *incarnata*; true *latifolia* is figured on No. 2973. The plate labelled *O. latifolia* in Curtis' Fl. Lond. is also *incarnata.*

Several forms of *latifolia* are found in Headington Wick Bog, including a hybrid between it and *maculata.* This has the solid stem and spreading leaves of *maculata*, but the flowers are very nearly those of *latifolia.*

***O. incarnata*, (L.) Fr.**

Syme, E. B. ix. 100. 1457. Nym. 692.

Native. Marshes. Rare. P. June.

First record, *French and Boswell*, about 1870.

2. Ouse. Between Middleton Stoney and Fritwell, *A. Fr.*

4. Ray. Headington Wick Copse, *H. Bos.*, *Rev. R. Linton*!

Berks. Bessilsleigh, Tubney, *Rep. of Rec. Club*, 1880, 1882. Bucks, Northants, Gloster E., Kelmsford, Warwick.

Var. *O. angustifolia*, Rchb. *O. Traunsteineri*, Saut. Nym. 692, species.

Native. Marshes. Rare. P. June.

4. Ray. Headington Wick.

I cannot see that this is more than a variety of *incarnata*.

***O. mascula*, L. Early Purple Orchis.**

Top. Bot. 387. Syme, E. B. ix. 97. 1455. Nym. 693.

Native. Sylvestral, etc. Open woods, meadows, chalk downs. Common, and generally distributed. P. May-July.

First record, *Sib.* 1794.

White-flowered forms are occasionally met with, and a spotless-leaved form has also been noticed.

***O. maculata*, L. Spotted Orchis.**

Top. Bot. 390. Syme, E. B. ix. 101. 1459. Nym. 692.

Native. Sylvestral, etc. Meadows, thickets, marshes, heaths, etc. Common and generally distributed. P. May, June.

First record, *Sib.* 1794.

It varies considerably in colour, from white to dark rose purple.

***O. pyramidalis*, L. Pyramidal Orchis.**

Top. Bot. 388. Syme, E. B. ix. 90. 1449. Nym. 694.

Anacamptis pyramidalis, Rich.

Native. Glareal, etc. Dry calcareous pastures, roadsides and chalk downs. Locally common. P. June, July.

First record, *Sib.* 1794.

2. Ouse. Hardwick Heath! Ardley! Tusmore! Mixbury! Fringford, *R. C. Pryor*. Near Fritwell, *A. Fr.*

3. Swere. Broughton Park, extinct; plantation beyond Fulling Mill, *T. Bees*. Swerford, *Mrs. Davis*. Deddington, *A. Fr.* Near Tadmarton, *O. V. Aplin*.

4. Ray. Near Rousham, *Rev. E. Fox*. Middleton Stoney, *F. Rogers*! Begbrook, Kirtlington.

5. Isis. Wychwood! Between Woodstock and Enstone! *Sib.* Roadside between Witney and Burford! *Bz.* Between Chipping Norton

and Shipton, *A. Fr.* Between Sturdy's Castle and Hopcroft's Holt, *Bz.* Woodstock! *Rogers.* Near Charlbury! *J. Albright.* Woodstock Road, five miles from Oxford, *H. Bos.* Stonesfield! *O. V. Aplin.* Steep bank by the Evenlode, Handborough, Blenheim, Tainton Quarries.

7. **Thames.** Caversham Warren! *Sib.* Lewknor, *A. Fr.* Wormsley, *Hb. Bz.* Stokenchurch! *H. Bos.* Henley, Nuffield, Goring.

Berks. Near South Hinksey, *Bz.* Basildon, Streatley! *Britt.* Pangbourne.

HABENARIA. Br.

H. conopsea, Benth. *Fragrant Orchis.*

Gymnadenia conopsea, Br. *Orchis*, L.

Top. Bot. 390. Syme, E. B. ix. 102. 1460. Nym. 695. Bz. 409.

Native. Glareal, paludal. Chalk downs, limestone pastures, and marshes. Local. P. June, July.

First record, *Sib.* *Orchis conopsea*, L.

2. **Ouse.** Cottisford Heath, *Gull.*

3. **Swere.** Wroxton lower pond, *T. Lamb.*

4. **Ray.** Bogs under Headington Wick Copse! 'In peat bogs near Oxford is thrice as large flowers a month or six weeks later, and more fragrant than the ordinary form,' *H. Bos. in Phyt.* 5. 157. Middleton, *R. C. Pryor.*

6. **Thame.** Rough pastures adjoining Cowley Common, *Sib.*

7. **Thames.** Lewknor! *A. Fr.* Goring! *R. Linton.* Caversham! *Newbould.* Watlington Downs! *Rev. F. Bennett.* Maple Durham, Pyrtton Common, Chinnor, side of Great Wood.

Berks. Old road to Eynsham, *Bz.* In wet meadows about Wytham, *Hb. Dill.* Bucks, Northants.

Is our bog plant the *Gymnadenia densiflora* A. D., see *Reich. Fl. Deutsch.* 424 (!) The spurs are as long as those of the chalk plant.

H. chlorolenca, Ridley. *Large Butterfly Orchis.*

Habenaria chlorantha, Bab. *Orchis bifolia*, L. *Platanthera chlorantha*, Cust.

Syme, E. B. ix. 107. 1463. Nym. 695.

Native. Sylvestral. Woods, thickets, bushy places. Widely distributed, but not very common. P. June, July.

First record, *Wm. Coles*, 1657.

3. **Swere.** Broughton, very rare, *A. Bees.* Swerford, *Mrs. Davis, bifolia.* Great Tew, *A. Fr.*

4. **Ray.** Stow Wood! *Wm. Coles.* Near Begbrook, *Walk., bifolia.* Wood Eaton, *H. Ridley.* Marston Copse, Piddington Wood, 3 feet high, spike 10 in. long, flowers, $\frac{1}{2}$ in. across.

5. **Isis.** Wychwood! *Blackstone*. Ditchley! *Aplin*. Tar Wood, *Sib*. Blenheim, Eynsham, see *Rep. of Rec. Club*, 1880. Near the Devil's Pool, Ditchley.
6. **Thame.** Shotover! *Sib*. *Orchis bifolia*.
7. **Thames.** Beech Wood, Henley Park Hill, Stokenchurch, *bifolia*, *Bz*. Maple Durham, *H. Trimen*, *Hb. Br. Mus.* Chinnor, see *Rep. of Rec. Club*, 1883.

Berks. Bagley, Wittenham, Basildon, Streatley, Compton, etc.

H. bifolia, *R. Br.* *Small Butterfly Orchis*.

Habenaria bifolia, Bab. *Platanthera solstitialis*, Bnng.

Syme, E. B. ix. 105. 1464. Nym. 696. Erroneously lettered *chlorantha* on plate.

Native. Ericetal and sylvestral. Woods and heathy places. Rare. P. June.

First record, *the Author*, 1880.

5. **Isis.** Wychwood, Ditchley, near the Devil's Pool.

7. **Thames.** Chinnor and Crowell Hill.

This is found in shady woods with *chloroleuca*, as well as on open heathy ground, which latter in Oxford rather refers to places recently cleared from wood, so that sylvestral fairly describes it here. Its characters remain constant when growing in densest shade, as in Ditchley Wood, and I have failed to find intermediates.

Berks, Bucks, Northants, Gloster E., Warwick.

H. viridis, *R. Br.* *Frog Orchis*.

Caloglossum viride, Hart. *Platanthera*, Lind.

Top. Bot. 292. Syme, E. B. ix. 105. 1462. Nym. 696.

Native. Pascual. Pastures, heaths, and downs. Local. Rather rare. P. June–Sept.

First record, *Johnson in Mercurius*, 1634. 'By Barkway and many places about Oxford.' *Orchis Batrachites*.

3. **Swere.** Swerford Park, *Mrs. Davis*.

4. **Ray.** Meadows near Oxford, *Bz. in Purton*. On the Bicester Road, six miles from Oxford, *R. C. Pryor*. Noke, *H. Bos*. Beyond Rookery, Marston, *T. Thurland*! Near Weston Peat Pits.

5. **Isis.** South Leigh, Cornbury! Burford Downs, *Sib*. North Leigh Heath.

6. **Thame.** Shotover, *Sib*.

7. **Thames.** Lewknor, *A. Fr.* Chalk Wood, *J. Wood*, *MSS.* Beacon Hill.

Berks. Compton Downs, Ilalely Downs, Streatley! Cumnor!

ACERAS. Br.

? **A. anthropophora**, *Br.* *Man Orchis*.

Syme, E. B. ix. 87. 1447. Nym. 697.

Native(?) Limestone and chalk pastures. Extremely rare. P. June.
First record, *Wm. Colegrave in Bees. MSS.*, about 1850.

3. *Swere*. Swerford, *Bees. MSS.*; in absence of specimens I should imagine it to have been *Habenaria viridis*.

Berks. *O. Anthropophora autumnalis*, Col. mas. C. B. The Man Orchis, with *O. Anthrop. oreades altera* Col. and *O. oreades trunco pallido brachiis et cruribus saturate rubescentibus*. These three Satyrions were found on several chalky hills near the highway from Wallingford to Reading on Berkshire side of river by Mr. Brown! *Merrett*, 1666. This was probably the Frog and not the Man Orchis. The third refers to *O. militaris*. Bucks(?) Northants, Colley Weston, Barnack.

OPHEYS. L.

O. aranifera, *Huds.* Spider Orchis.

Top. Bot. 23 (?) 395. Syme, E. B. ix. 112. 1469, Oxford. Nym. 697.

Native. Glareal. Calcareous pastures, roadsides, old quarries. Extremely rare, if not extinct. P. March, April.

First record, *Merrett*, 1667, *O. sphegodes major et minor*; near Stokenchurch and in many places about Oxford, *Mr. Witham*.

5. *Isis*. On the chalk-ground near Stonesfield, *Blackstone*. Between Witney and Burford, a little beyond the fourth milestone from Witney on the right hand side, among the stone-pits by the roadside upon rising ground, together with the *Thlaspi perfoliatum*, *Dr. Lightfoot MSS.* about 1770. *Mr. F. T. Richards, Bolton King*, and myself found a barren plant, which I believe to be *aranifera*, in the same locality in 1883; it has not yet flowered. *Mr. Richards* believes it to be *apifera*. This locality is given in *Sib*.

6. *Thame*. Old stone quarries, Wheatley, *Sib*. On a hilly piece of ground near Mr. Shutz's gate leading to Wheatley, about the stone-pits, *Mr. Hinton*, 1806. Not found about Wheatley, 1831, *Bx.* in *Walk*. Very abundantly at Great Haseley, near Great Milton, May 2, 1840, *Daubeny*; not there in 1884.

7. *Thames*. Caversham Warren, *Sib*. Stokenchurch, *Merrett*. Northants extinct.

O. apifera, *Huds.* Bee Orchis.

Top. Bot. 394. Syme, E. B. ix. 111. 1467. Nym. 698. Bx. 8.

Native. Glareal, etc. Fields, rail-banks, quarries, brick-pits, almost always on clay soil. Local. P. June, July.

First record, *Wm. Coles*, 1647. In many places about Oxford, *Merrett*, 1666. *Orchis Melittias*.

3. *Swere*. Swerford Park, *Mrs. Davis*. Very abundant 1837, also *A. Fr.* 1870.

4. **Ray.** In a large close near Elsfield, on the side of the hill between it and Oxford, *Wm. Coles*. Tackley railside, Headington Wick.
 5. **Isis.** Chalky ground near Stonesfield, *Blacks*. Cornbury Park, *T. Lamb* Railside, Wolvercote, *H. Peake*! Woodstock, Wychwood, Handborough.
 6. **Thame.** Old road going over Shotover, *Bz.* 1812. North-west side of Shotover, *Dr. Cradock*! still there 1885. Dorchester, *Gough's Camden*. Wheatley above the tunnel.
 7. **Thames.** Penley Hangings, *Sib.*! 1884. Nuffield, Mongewell, *Bz.* Lewknor, *A. Fr.* Chinnor, *R. B. D'Oyly* *Aplin*! Henley Park Hill. Swincombe Down, *H. Bos.* Near Goring.
- Berks.** Streatley Hill, Hurley, Appleton, near South Hinksey. A little beyond Merley Wood upon high meadow, 1740, *Hb. Dill.*
Flowers with white wings at Wolvercote.

O. muscifera, Huds. *Fly Orchis.*

Top. Bot. 395. Syme, E. B. ix. 114. 1471. Nym. 698.

Native. Sylvestral. Woods, thickets on chalk or limestone. Local and rather rare. P. June.

First record, *Bobart*, 1699, *Orchis muscæ corpus referens minor*, J. B. 'In herbidis montosis ad sylvarum cæduarum margines, solo præsertim cretaceo v. g. circa Stokenchurch, Henley,' *Morison*, iii.

5. **Isis.** Stonesfield, *Rev. A. Robertson*.

7. **Thames.** Henley! Stokenchurch! *Bobart*. Wormaley! *Sib.* Near Henley, *Daubeny*, 1842, *Bz.* 1831; there in 1884. Maple Durham Whitchurch, Hartstock Wood, Goring, Aston Wood, between Hollandridge and Whitehill Shaw, Penley Wood.

Berks. Cookham, Bisham, Basildon, Hinksey, Appleton, *Brit.* Absent from Warwick.

HERMINIUM. Br.

H. monorchis, Br. *Musk Orchis.*

Top. Bot. 23 (?) 394. Syme, E. B. ix. 110. 1466. Nym. 699.

Native. Chalky and limestone pastures. Very rare, if not extinct. P. June, July.

First record, *Orchis odorata moschata sive Monorchis*, C. B. 'Sylvio pago Stokenchurch dicto vicinis et declivibus prope Cawsham, aliisque consimilibus, præsertim cretaceo solo gaudet,' *Bobart*, 1699; *Morison*, iii. 497, *Junio mense floret*.

5. **Isis.** On the west side of Wootton field, two miles from Woodstock [now enclosed], *Dr. Lightfoot*, *MSS.*

7. **Thames.** Caversham Hills by the Thames side, *Bobart*, 1699. *Dr. Lightfoot*, specimen in *Hb. Br. Mus.* 1760. Stokenchurch Wood, *Bobart*; also *J. Oglander*, July 24, 1820.

Berks (?) **Bucks.** Northants extinct. Gloster E.

ORD. LXXVIII. IRIDEÆ, Br.

IRIS. L.

** *Iris germanica*, L. Nym. 700.

Alien. Garden escape at Marston and by the Tennis Court in Norham Gardens.

I. pseudacorus, L.

Top. Bot. 397. Syme, E. B. ix. 145. 1495. Nym. 702. Bx. 82.

Native. Paludal. Riversides and marshy places. Common. P. June, July. Frequent in all the districts except the Stour.

Var. *I. Pseudacorus*, Bor. Marshes. Rare.

4. Ray. Headington Wick, with *acoriiformis*.

Var. *I. acoriiformis*, Bor. Syme, E. B. ix. 145. 1495.

4. Ray. Cherwell side, Headington Wick.

5. Isis. Port Meadow, the common river from hence to Kelmscott.

6. Thame. Iffley, etc.

7. Thames. Mongewell southwards.

This is the common Iris of the Thames and Cherwell.

I. foetidissima, L. *Stinking Gladdon.*

Top. Bot. 396. Syme, E. B. ix. 143. 1494. Nym. 702.

Native. Sylvestral. Woods and thickets. Very rare. P. June, July.

First record, *Blackstone*, 1737, on a hill near Oxford Castle.

4. Ray. Copee, Elsfield, *Mr. Rowley in Purton*. *Rev. E. Fox* believes he has seen it near Steeple Barton.

5. Isis. Oxford Castle, *Blacks.*, extinct. Near Woodstock Park, *Daubeny*, 1841.

7. Thames. Henley, *H. Ridley*. Hartslock Wood, *W. Pamplin*! Berks. Bagley, *Rev. E. Fox*. Moulsoford. Bucks. Northants alien. Gloster E., Warwick.

* *Crocus vernus*, *Wulf.*

Alien. Woods at Marsh Baldon, *Rev. H. E. Fox*.

[*Crocus nudiflorus*, *Sm.* Lammas and Pigwell Fields near Warwick.]

ORD. LXXIX. AMARYLLIDEÆ, Br.

NARCISSUS. L.

N. Pseudo-Narcissus, L. *Daffodil.*

Top. Bot. 397*. Syme, E. B. ix. 157. 1501. Nym. 708. Bx. 73.

Native. Sylvestral. Woods and thickets. Local. P. March–April.
First record, *Sib.* 1794.

3. Swere. Hanwell plantation, *Gull.*; not wild in this district.

4. Ray. Noke Wood, *Sib.* 1884. Wood near Wood Eaton, *Bz.*
Probably same locality, Tackley.

5. Isis. Wychwood! *H. Bos.* Glympton, *Rev. E. Fox.* Woods
between Tackley and Glympton, Lady Grove, *T. Westcombe.*

6. Thame. North side, Shotover, *Walk. Fl.*; probably planted.

7. Thames. Lambridge Woods, *T. Hopkins, M.A.*

Berks. Bagley Wood, Tubney, Appleton, Powder Hill Copse. The
latter locality referred to by *Mat. Arnold*: ‘I know the wood
which hides the daffodil;’ ‘*Thyrsis.*’

Bucks†, Northants, Gloster, Warwick.

In *Trans. Linn. Soc.*, vol. v. 1800, reference is made to ‘*N. Sibthorpii*,
Haworth; nectario ore patulo, corolla tube abbreviated, found wild in Oxon
by Dr. Sibthorp, and is probably the *N. Pseudo Narcissus* of Fl. Oxon,’
but the Noke daffodils are quite typical. The daffodil is marked with an
asterisk in *Top. Bot.*, but the plant is almost certainly a native of the
county.

* *N. major*, *Curt.*

Comp. Cyb. 580. Nym. 709.

Denizen. Fields, orchards, plantations. Rather rare. P. March–April.
First record, *the Author*, 1881.

3. Swere. Field near Lovell’s Lynches, Hooknorton.

4. Ray. Near Water Eaton Manor House, near Tackley.
Northants, Warwick.

* *N. biflorus*, *Curt.*

Syme, E. B. ix. 161. 1503. Nym. 710.

Alien. Fields. Rare. P. April.

4. Ray. Near Tackley, *F. A. Bellamy*!
Northants, Warwick.

* *N. poeticus*, *L.* *Pheasant’s Eye.*

Syme, E. B. ix. 162. 1504. Nym. 710.

Alien. Fields. Very rare. P. April.

4. Ray. Near Tackley, quite naturalized.

7. Thames. Recently planted on Binfield Heath.
Warwick.

LEUCOJUM. L.

[* *L. vernum*, *L.*

Top. Bot. 398. Syme, E. B. ix. 165. 1506. Nym. 714.

Alien. First record, *Dr. Woodward*, 1834.

Hb. Lawson spec. with this note: ‘It grows in considerable quantities
alongside of a ploughed field behind the Roman Catholic Church at Hethe,

near Bicester. It occupies a space about twenty yards in length by five in width, being in fact that part of the enclosure which, from the nature of the ground, could not be profitably tilled by the farmer; but it did formerly extend over a much larger extent until a part of the copse which formed the course of the field was brought into cultivation, and this was the case only a year before I saw the plant, which was in 1837. In consequence I saw strewed in the furrows a great abundance of the bulb turned up by the relentless ploughshare. Happily, however, the spot, still untouched, is of that declivitous nature as to render it improbable that it will ever be encroached upon. Growing close by the *Leucojum* I found *Galanthus nivalis* and *Vinca minor*. The vicinity of these plants renders it in my estimation very doubtful (whether) the *Leucojum* is indigenous, at all events it is a long-established denizen. There are no traces of building at hand, but there is a small farm-house about 160 yards distant. The oldest inhabitant remembers the place in the same state that it was until the present occupier ploughed the field nearer to the hedge.' *E. F. Writts*. 'I have now in flower in the Bot. Gard. some bulbs of *L. vernal*, sent me about two years ago by *G. Woodward, Esq.* This gentleman informed me they were obtained from a brake near the Roman Catholic Chapel at Hethe, where they had established themselves in unusual quantities. Mr. Woodward tells me it has been known to grow there for more than a century.' *Gard. Mag.*, July 1836, p. 371; *W. Baxter*. Near Bicester, *Bab. Man.* Near a farmhouse, Bicester, *Hook. St. Fl.* Hethe is five miles from Bicester. Mr. F. T. Richards and the Author searched for it assiduously in 1881 and 1882, but unsuccessfully, no traces of *Leucojum*, *Vinca*, or *Galanthus* being visible.

Plants from this locality are still cultivated in the Botanic Garden.]

L. aestivum, L. *Summer Snowflake.*

Top. Bot. 398. Syme, E. B. ix. 164. 1505. Nym. 714. Bx. 55.

Native. Paludal. Osier-holts and shady places by the Thames side.

Local. P. May, June.

First record, *Rev. W. T. Bree*, in *Purton*, 1821.

6. **Thame.** Banks of Isis below Iffley and Sandford, *Rev. W. T. Bree*. Sandford, St. John's Island, *W. Barnes* in *Walk*. In an osier-holt between Iffley and Sandford, 1865! *Dyer, Hb. Br. Mus.* Littlemore, *Rev. A. Ley, Rep. L. Bot. Ex. Club*, 1868! Sandford, *Rev. R. Linton*! Banks of Isis near Oxford, *Syme, E. B.* These records refer probably to two localities only. Between Sandford and Nuneham, *Hb. Lawson*. Marsh Baldon, *H. Bos*. Clifton Hampden to Dorchester.

7. **Thames.** Sonning! *F. Tufnail*. In plenty on mud banks of small wooded islet on the Oxon shore of river opposite the middle mouth of Loddon, Shiplake, *F. A. Lees*. Little Stoke, Maple Durham.

Berks. Reading, near Shiplake, Sonning, Wittenham, etc. **Bucks.**

GALANTHEUS. L.

G. nivalis, L. *Snowdrop.*

Comp. Cyb. 580. Syme, E. B. ix. 167. 1507. Nym. 714. Bx. 33.

Alien. Orchards, plantations, etc. Rare. P. March.

2. Ouse. Hethe, *G. Woodward*, see *Leucojum vernum*. Tusmore.

3. Swere. Hanwell Plantation, *Gull*. Hooknorton.

4. Ray. Water Eaton field near Manor House; Tackley.

6. Thame. Chapel-yard at Rycote, *Bz*.

7. Thames. Wood near Chequers Common, the most wild situation in Oxon; but here it may have been the site of a cottage, although no traces of such are visible.

Berks. Reading, Enborne, Hampstead Norris, Appleton, Bessilsleigh, *Brit.*

ORD. LXXX. ASPARAGEÆ, DC.

RUSCUS. L.

R. aculeatus, L. *Butcher's Broom.*

Top. Bot. 23 *. Syme, E. B. ix. 184. 1516. Nym. 715. Bx. 474.

Native. Sylvestral. Woods on the chalk. Planted elsewhere. Rare. P. March.

First record, *Ruscus*, Matth. 'In sylvis in comitatibus cum Berchensi tum Oxoniensi hand longe a Redingo oppido aliusque copiose nascitur,' *Bobart*, 1699, *Morison*, iii.

3. Swere. Wall Close, West St., garden escape, *Bees*. Hanwell Wood.

4. Ray. Magdalen College Walks, planted.

7. Thames. Near Reading, *Bobart* in *Morison* and *Ray*, iii. Hartslock Wood! Henley! *H. Bos*. Maple Durham, Goring, Whitechurch.

Berks. Streatley. Bucks.

* *Asparagus campestris*, *Reich*.

Alien. Garden escape, old walls, etc. Rare.

5. Isis. Walls of Godstow Nunnery.

7. Thames. Maple Durham.

POLYGONATUM. Mch.

P. multiflorum, All. *Solomon's Seal.*

Syme, E. B. ix. 177. 1513. Nym. 717.

Native or denizen. Sylvestral. Woods and thickets. Very rare. P. May, June.

First record, *H. Boswell*, 1859.

3. Swere. Swerford, *Rev. E. Fox*. Mrs. Davis informs me she planted

it there. Lovell's Lynches, Hooknorton, *A. Fr.* *Galanthus* grows with it, and *Paris*, the latter native.

4. *Ray.* Thrupp, *H. Boswell.*

Although abundant in the Berkshire woods, it is not on record for the Thames district.

Berks. Morison (*Bobart*), *Ray's Cat.* Unwell Wood, Ashridge Woods, Compton, Kintbury, Newbury, Ilsley, *Brit.*

Bucks, Gloster E., Northants.

[*P. officinale*, *L.* Gloster E.]

CONVALLARIA. *L.*

C. majalis, *L.* *Lily of the Valley.*

Top. Bot. 404. Syme, E. B. ix. 180. 1514. Nym. 717. Bx. 78.

Native. Sylvestral. Woods and coppices. Very rare. *P.* May, June. First record, *Blackstone*, 1746.

2. *Ouse.* Stoke Lyne Great Wood, *R. Woodward.*

3. *Swere.* Shelswell, *E. Walford.*

4. *Ray.* Woodcroft near Bayswater, *F. Thurland.* Tackley, *H. Bos.*

5. *Isis.* Coppices of Wychwood sparingly, *Blackstone.* Mill Wood.

7. *Thames.* Beech Woods, Stokenchurch, *Sib!* 1885. Island in Thames near Reading, *Britten.*

Berks. Bagley Wood, *W. Coles*, 1647! 1885. Childswell Farm, *Dr. Williams.* *Bucks,* Northants, Gloster E., Warwick.

PARIS. *L.*

P. quadrifolia, *L.* *Herb Paris.*

Top. Bot. 406. Syme, E. B. ix. 173. 1509. Nym. 717. Bx. 6.

Native. Sylvestral. Woods. Local. *P.* May, June.

First record, *James Benwell*, about 1790.

3. *Swere.* Hooknorton! *Bees.* Swerford, *Mrs. Davis.*

4. *Ray.* Abundant in woods near Oxford, *Rev. W. T. Bree* in *Purton.* Headington Wick Copse, *Sib!* Noke Wood, *H. Bos.* Beckley Wood.

5. *Isis.* Pinsley Wood, *W. Bz.* Eynsham Wood, *H. Ridley.* Tar Wood, *H. Bos.* Parkwall Copse, Charlbury; Cornbury near the pond, *T. Westcombe.* Sarsgrove, *Gull.* Tar Wood, *H. Bos.*

7. *Thames.* Mongewell! *J. Oglander.* Woody ravine adjoining Stokenchurch Common, *Phyt.* i. 119. Wormsley, *Hb. Bz.* Upper Assenton, *E. Jenner*, 1832. Woods near North End, *F. Tufnail.* Aston Wood.

Berks. Wytham Wood, Compton, Woodbury, etc., *Brit.*

ORD. LXXXI. DIOSCOREÆ, Br.

TAMUS. L.**T. communis, L.** *Black Briony.*

Top. Bot. 466. Syme, E. B. ix. 171. 1508. Nym. 718. Bx. 291.

Native. Septal. Hedges, thickets. Common and generally distributed. P. June-July.

First record, *Sib.* 1794.

ORD. LXXXII. LILIACEÆ, D C.

* *Lilium Martagon, L.* *Turk's Cap.*

Comp. Cyb. 580. Syme, E. B. ix. 9. 1518. Nym. 721. Bx. 501.

Alien. Garden escape, as by railside between Church Handborough and Combe, *F. T. Richards!* Established at Dorchester, *Rev. F. Bennett.***FRIILLARIA. L.****F. Meleagris, L.** *Fritillary. Snake's-head.*

Top. Bot. 399. Syme, E. B. ix. 189. 1519. Nym. 721. Bx. 1.

Native. Paludal. Wet meadows. Locally abundant. P. April, May.

First record, *Dr. Lightfoot*, 1785.4. *Ray.* Magdalen College Meadow, *Dr. Lightfoot.*5. *Isis.* By the Windrush at Witney! and Minster Lovell, *J. Albright.*
Near Bampton on the *Isis*, *H. Bos.* Eynsham, *M. Arnold.* Near
St. Edward's School, *H. Peake.* Standlake, *Wh. in Walk.*6. *Thame.* Cowley Meadow! *Sib.* Abundant in a few meadows
about Oxford, *Daubeny's Guide.* Both red and white, abundant
about Oxford, *Rev. W. T. Bree in Purton.* Christ Church Meadow,
Newb., do., *Hb. Br. Mus. coll. Dyer.* Osier holt near Sandford,
1865. Iffley Meadows, Kennington Island, Thame, Chiselhampton.

'I know what white, what purple Fritillaries

The grassy harvest of the river fields

Above by Eynsham, down by Sandford, yields,

And what sedged brooks are Thames' tributaries.'

M. ARNOLD.

'The purple Fritillaries which every Oxford man has gathered by handfuls in the spongy meadows about Iffley Lock, with their dark-spotted petals converging into a bell, and nectaries at the base producing each a drop of honey,' *Grant Allen, Mac. Mag.* vol. 47, p. 33.

Berks. Iffley, Burghfield, Blewbury, etc. Bucks, Gloster W., Warwick.

One year, Mr. Baker informs me, Prof. Lawson sent to Kew 3000 specimens for use at the Science and Art Examination at South Kensington. This will give some idea of its abundance.

* *Tulipa sylvestris*, L. *Wild Tulip.*

Cyb. 2. 449. Syme, E. B. ix. 190. 1520. Nym. 723. Bx. 2.

Alien. Orchards, plantations, etc. P. May, June.

First record, *Dr. Williams in Purton*, 1821.

5. *Isis*. Christ Church Meadow, *Dr. Williams!* 1884. By a wood between Woodstock and Kidlington, 1856, *H. Bos.*

6. *Thame*. End of Cheney Lane, corner of last field on right, near old well, *Dr. Williams.*

7. *Thames*. In an orchard coppice Shiplake, and Binfield Heath, *W. G. P. in Phyt.* v. 315.

Berks. Boar's Hill, *Bolton King!* Bessilsleigh, *Miss Hoskyns.* Bucks, Westbury, *Hon. Mrs. Barrington.* Ashridge Park, *Dr. Lightfoot.* Northants, Courteenhall.

GAGEA. *Slab.*

G. lutea, Ker. *Yellow Star of Bethlehem.*

Top. Bot. 402. Syme, E. B. ix. 193. 1522. Nym. 725. Bx. 41.

Native. Sylvestral. Woods and shady places. Local. P. March, April.

First record, *Sir Jos. Banks*, 1760. *Ornithogalum luteum* (L.), *Sib.*

3. *Swere*. Swerford abundant, *Mrs. Davis.*

4. *Ray*. Beckley Wood.

5. *Isis*. North Leigh, Hanging Woods, *Dr. Lightfoot.* Woods about Oxford, *Sir Jos. Banks.* Not far from Woodstock, *Hb. Banks Br. Mus.* Woods near Ashford Mills! *Fawler, Sib.* Finstock, 1851, *J. Westcombe.* Blenheim Park near new Bridge, outside Cornbury Park wall, *J. Coles.* Lady Wood near Wilcote, *J. M. Albright.* Wood near Crawley, Wychwood, *W. Westell.* Mill Wood! *Miss Taunton.*

6. *Thame*. Corner of Nuneham Park near Culham Station, *Prof. Lawson*, 1876.

Berks. Near Cumnor, Childswell Farm, Chawley Hurst. Northants, Roade, Sibbertoft. Gloster E. Warwick.

ORNITHOGALUM. *L.*

* *O. umbellatum*, L. *Star of Bethlehem.*

Comp. Cyb. 582. Syme, E. B. ix. 196. 1524. Nym. 727. Bx. 124.

First record, *Sib.* 1794.

2. *Ouse*. Mixbury, *R. C. Pryor.*

3. **Swere.** Near Bodicote Mill, *Gull*. Hanwell Plantation, cornfield near Bloxham Grove, *A. Fr.*
4. **Ray.** Barton, *Sib.* Field between Cherwell and Marston Road, *H. Ridley*. Park Meadow, *Rev. E. Fox*. Water Eaton.
5. **Isis.** Christ Church Meadow, *Sib.* Copse near Godstow, *Ridley*! 1885.
6. **Thame.** Clifton Hampden, *Rev. F. Bennett*. Copse near Sandford Toll Gate, 1831, *Bx.*
7. **Thames.** Gathampton, *H. Bos.*, also *Hb. Lawson*!
Berks. Quarry Wood, Remenham.

* ***O. nutans*, L.**

Myogalum nutans, Lk.

Comp. Cyb. 582. Syme, E. B. ix. 195. 1523. Nym. 728.

Alien. Meadows, plantations, etc. Rare. P. April.

First record, *Miss Edwards*, 1834, in *Walk*.

4. **Ray.** Magdalen College Meadow, *Miss Edwards*, do., *H. Bos.* 1862.
Water Eaton, *Rep. of Rec. Club*, 1881.

5. **Isis.** Near Finstock, *T. Westcombe*, 1844, *Hb. Br. Mus.*

[*O. pyrenaicum*, L. Ashridge Woods, East Ilsley. Berks. Gloster?].

SCILLA. L.

***S. nutans*, L.** *Blue-bell. Wild Hyacinth.*

Top. Bot. 403. Syme, E. B. ix. 201. 1528. Nym. 731. Bx. 74.

Endymion nutans, Dum. *Hyacinthus non-scriptus*, L. *Agraphis nutans*, Lk.

Native. Sylvestral. Woods, thickets, hedges. Abundant. P. May, June.

First record, *Plot*, 1677, with pink and white flowers.

3. **Swere.** With white flowers in Shutford, *Bees*. Swerford do., *Mrs. Davis*. Hanwell, pink flowers, *A. Fr.*

4. **Ray.** Near Enslow Bridge, pale pink, *W. Wilson Saunders*. White, Tackley.

5. **Isis.** Wychwood, white and pink.

6. **Thame.** Shotover, white, *Ridley*.

7. **Thames.** Goring, white and pink.

On Shotover they are most abundant, the north side showing blue with them from a long distance. The woods near Goring, and the slopes of Wychwood, also show this plant in great beauty. In Berks, Wytham Wood is another locality in which they are found in profuse growth. Baxter noticed on it for the first time in Britain, *Puccinia Scillorum*, Grev. The bracts vary considerably in size. In Shotover Plantations a plant had them so much developed as to be more than double the length of flower.

[*S. autumnalis*, L. Gloster E.]

BOTRYANTHUS. Kth.

* *B. odoratus*, Kth. *Grape Hyacinth.*

Muscari racemosum, Miller.

Comp. Cyb. 334. Syme, E. B. ix. 202. 1529. Nym. 734. Bx. 92.

Alien. Plantations, walls, etc. Not native. Rare. P. March-May.

First record, ante 1835, *Baxter*.

3. *Swere*. Damp plantation north of Adderbury, 1881, *O. V. Aplin*.

4. *Ray*. Old walls in Bicester and Wendlebury, *Bx*.

6. *Thame*. In Shotover Plantations a patch in March, 1860, apparently as native as the primroses and violets with which it grew. Still there in 1876, *H. Bos*.

Berks. Newbury, *Sm. Engl. Fl.*

ALLIUM. L.

A. vineale, L.

Top. Bot. 400. Syme, E. B. ix. 210. 1534. Nym. 737.

Native. Dry banks, old walls, hedgesides. Local. Rather rare. June, July.

First record, *Sib*. 1794, or *Mr. Stonehouse*, 1650.

3. *Swere*. Bretch, *A. oleraceum*, of Bees. list in Top. Bot. 'In the spring of 1843 I found numerous young plants with fistulous leaves and a garlic smell, evidently an *Allium*, but in June they had all disappeared; an individual transplanted to the garden was dug up. From a specimen found on May 17, 1847, this proves to be *A. vineale*, also on the south side of the lane from Broughton gate to the Castle, plentiful at Bretch, 1864,' *Bees. MSS.* Garden wall against the church Adderbury, *T. Brayne*. Between Milton and Bloxham, *A. Fr.*

4. *Ray*. Marston Fields, *Bolton King!* Near Bicester, *T. Brayne*.

5. *Isis*. Meadows near Botley Road, *Sib*. Godstow Nunnery, *Bx.* / 1884. Between Witney and Burford, *F. Westell*. Broughton Poggs.

6. *Thame*. Bullingdon, *H. Bos*. Riverside between Culham and Clifton Lock, *H. E. Garnsey*.

7. *Thames*. Kidmore, *F. Tufnail*. Between Caversham and Maple Durham, *Sib*. Near Ewelme. Between Hardwick and Maple Durham.

Berks. Streatley, South Hinksey.

Var. *A. compactum*, Thuil.

3. *Swere*. Swerford, *T. Bees*. 1864.

6. *Thame*. Dorchester, *Rev. F. Bennett*.

'*A. sive porrum sylvestre*. Wilde Leeke amongst barley, Bechentrete, Mr. Stonehouse in *How's Phytologia*, 1650,' probably belongs here.

Berks. Cookham.

A. ursinum, L. *Ramsons.*

Top. Bot. 401. Syme, E. B. ix. 219. 1540. Nym. 738. Bx. 97.

Native. Woods. Local. Rather rare. May, June.

First record, *Blackstone*, 1737.

3. Swere. Plentiful by brook between Bloxham Grove and Adderbury West.

4. Ray. Stow Wood! Headington Wick Copse, *Sib.* Near Norton Windmill, Bicester, *G. Woodward*. Beckley Wood.

5. Isis. By the side of a brook near Cornbury Quarry, and not elsewhere as I observed, *Blackstone MSS.* Ditchley Wood! by the pond Cornbury! *T. Westcombe*.

7. Thames. Maple Durham! *F. Tufnail*. Chinnor Wood.

[*A. oleraceum, L.*

Syme, E. B. ix. 213. 1505.

Top. Bot. 399, error, see under *A. vineale, L.*]

Northants, Gloster W., Warwick.

[*Narthecium ossifragum, L.* *Lancashire Asphodel.*

Berks. Bulmersh Park, Sonning Hill Wells, *Dr. Lightfoot*. Windsor Great Park. Bucks, Warwick, Gloster W.]

COLCHICUM. L.

C. autumnale, L. *Meadow Saffron.*

Top. Bot. 407. Syme, E. B. ix. 225. 1544. Nym. 742. Bx. 17.

Native. Woods, thickets, meadows. Locally abundant. P.

First record, *Merrett*, 1666. *Colchicum Anglicum petalis ex albo et purpureo dimidiatim mixtis hæc tria Colchica crescunt in prato juxta Comb.*, *D. Brown*.

3. Swere. Deepslade, Claydon Hill, near North Newington, *Gull.* and *Bees.* Ox Hill, *T. Brayne*. Worton Wood, *R. French*.

4. Ray. Near Stow Wood, *T. Thurland*. Field south of Kirtlington called Galway Close, also sparingly in Oldbury, *W. W. Saunders*. Between Barton and Headington, *Bx. in Purton*. Between Bicester and Langford Lane, *G. Woodward*. Upper Heyford, *Bx.* Tackley, *Rev. E. Fox*.

5. Isis. Combe, *Mr. Brown in Merrett!* Moist meadows below Stonesfield, and in several parts of Wychwood, plentifully, *Blackstone*. Saragrove, Cornwell, Spilsbury, *T. Bees*. Heythorpe, Ashford Mills! *Sib.* Church Handborough, *Bx.* Rollright, *Misa*

Arnetriding. Alvescott, Mr. Barrett. Leafield, near Filkins and Bradwell, *Bishop of Carlisle*. Stanton Harcourt, *Sib*. Ditchley, O. V. *Aplin*! Stonesfield, Mill Wood, Wootton Wood, Burford, very abundant in Wychwood and Ditchley Wood. Oxford references are given in *Ray, Sm. Eng. Fl., Martyn, Gough, Bot. Guide*, etc.

Berks. Appleton, Cumnor, Eaton Stibble.

ORD. LXXXIII. JUNCACEÆ, Fr.

JUNCUS. DC.

J. conglomeratus, L. *Clustered Rush*.

Top. Bot. 430. Syme, E. B. x. 20. 1561. Nym. 747.

Native. Paludal. Wet fields, ditches, and wet places. Rather common and generally distributed. P. June, July.

First record, *Sib*. 1794.

Lax flowered forms occur, when the minute terminal mucro to the capsule will distinguish this from the next plant.

J. effusus, L. *Soft Rush*.

Top. Bot. 430. Syme, E. B. x. 21. 1561. Nym. 746.

Native. Paludal, etc. Marshes, moist heaths, wet ditches, etc. Rather commoner than preceding species. P. July, Aug.

Occurs in all the districts.

First record, *Sib*. 1794.

J. diffusus, Hoppe.

Syme, E. B. x. 24. 1562. Nym. 746. Comp. Cyb. 351.

Native. Paludal. Wet heaths, marshes. Rare or overlooked. P. July, Aug.

First record, *the Author, Journ. Bot.* 1884, p. 348.

5. *Isis*. North Leigh Heath, Grove Wood border, near Kingham, with *glaucus* and *effusus*. From the former it is readily distinguished by its continuous pith and smaller capsules, from *effusus* by the glossy black sheaths and stronger stems. The plant varies not only in colour and stem striation but also in the continuity of pith. See also *Rep. of Rec. Club*, 1884.

Berks. Childswell Farm, H. Boswell in *Hb. Br. Mus.*, 1861. Near Oddington. Gloster E., Warwick.

J. glaucus, *Sib*. *Hard Rush*.

Top. Bot. 430. Syme, E. B. x. 25. 1563. Nym. 746.

Native. Paludal. Wet meadows, roadsides, heaths. Common in all

the districts. Drainage is decreasing it round Oxford, where it still occurs by canalside close to Hythe Bridge. P. July.

First record, *Sib.* 1794.

***J. obtusiflorus*, Ehrh.**

Top. Bot. 432. Syme, E. B. x. 28. 1516. Nym. 747.

Native. Uliginal. Marshes, bogs. Local. Decreasing. P. July-Sept.

First record, *Baxter in Purton*, app. 182. Common in boggy places about Oxford, and with *Puccinia striola*, Lk., on the dead culms, *Bx.* MSS.

3. Swere. Hanwell Bog, *R. French*.

4. Ray. Weston-on-the-Green, *Mr. Holliday!* Beckley, *Rev. Moyle Rogers*. Headington Wick abundant, marsh by railside near Merton.

6. Thame. Bullingdon Green! *Bx.* South side Shotover, *H. Bos.* North side Shotover rare.

Berks. Frilford, Bagley, Powder Hill Copse, Childswell Farm. Northants, Gloster E. (?), Warwick.

***J. sylvaticus*, Reich.**

J. acutiflorus, Ehrh. *J. nemorosus*, Sib.

Top. Bot. 431. Syme, E. B. x. 29. 1567. Nym. 747.

Native. Paludal. Wet meadows, moist woods, etc. P. July, Aug.

Recorded from all the districts, but much less common than *lampocarpus*.

***J. lampocarpus*, Ehrh., who by an error wrote it *lampocarpus*.**

Top. Bot. 431. Syme, E. B. x. 31. 1568. Nym. 747. *Bx.* 399.

Native. Uliginal, etc. Wet meadows, ditches, pondsides, etc. Common in all the districts. P. July-Sept.

First record, *Sib.* 1794. *J. compressus*, Variat foliis fasciculatis ex morsura insectorum floribus viviparis.

***J. supinus*, Mch. *J. uliginosus*, Roth. (Sib.)**

Top. Bot. 432. Syme, E. B. x. 33. 1570. Nym. 748.

Native. Uliginal. Moist heaths, wet boggy places. Rather rare. P. July, Aug.

First record, *Sir Joseph Banks*, about 1760, near Oxford.

4. Ray. Marston.

5. Isis. Eynsham Heath, var. *vivipara*, *Sib.* Wychwood, North Leigh, var. *subverticillata*, W. Ramsden Heath.

6. Thame. Bullingdon, var. *vivipara*, *Sib.* Shotover, *Hb. Bx.* Rail-side Wheatley.

7. Thames. Nettlebed, Binfield Heath.

J. squarrosus, L. *Heath Rush.*

Top. Bot. 434. Syme, E. B. x. 39. 1571. Nym. 748.

Native. Ericetal. Heaths. Very rare, if not extinct. P. July.

First record, *Sir Jos. Banks*, 1760.

5. *Isis*. Witney Common, *Hb. Banks, Br. Mus.* Eynsham Heath, *Sib.*

It is singularly absent from Binfield Heath, and has been vainly sought for on North Leigh Heath. Witney Common is now a topographical expression, and probably Eynsham and North Leigh are identical.

Berks. Bucks, Northants, very rare. Warwick.

J. compressus, Jacq. *Round-fruited Rush.*

Top. Bot. 433. Syme, E. B. x. 37. 1575. Nym. 748.

Native. Paludal. Moist meadows. Local and rare. P. June, July.

First record, *Sib. J. bulbosus*.

3. Swere. Marches Banbury, *T. Bees*.

4. Ray. In a field at further end of Marston Lane where the road turns down to Marston. Between Oddington and Otmoor, *Bz.* Weston-on-the-Green, *Mr. Holliday*.

5. *Isis*. Binsey, *Sib.* Wood margin, clayey soil, Bladon, see *Rep. of Rec. Club*, 1880. Riverside Osney, fine specimen.

6. Thame. In long meadow between St. Clement's and Iffley, by side of a cart-road leading from the London Road to Cowley Marsh, Bullingdon Green, between Cowley Marsh and Cowley, *Bz.*

Berks. Sunninghill, *Dr. Lightfoot*. Near Bablock Hithe, *F. Walker*. Grandpont, *H. Bos.* Happy Valley, *Rep. of Rec. Club*, 1881. Northants.

[*J. Gerardi, Lois.* Warwickshire.]

J. bufonius, L. *Toad Rush.*

Top. Bot. 433. Syme, E. B. iii. 10. 35. 1572. Nym. 749.

Native. Paludal, etc. Moist woods, pondsides, etc. Found in all the districts. A. July, Aug.

First record, *Sib.* 1794.

The form or variety *fasciculatus*, Bert., occurs at Nettlebed, Binfield, etc., and var. *J. ranarius*, P., with subsolitary flowers and shorter perianth leaves has also been found.

LUZULA. DC.**L. maxima, DC.** *Great Wood Rush.*

L. sylvatica, Gaud. *Juncus sylvaticus*, Huds.

Top. Bot. 434. Syme, E. B. x. 7. 1549. Nym. 750.

Native. Sylvestral. Woods, thickets. Rather rare. P. April, May.

First record, *Sib.* 1794.

4. Ray. Stow Wood, *Sib.* 1

6. Thame. Shotover! Tar Wood, *Sib.*

7. Thames. Stokenchurch Woods.

Berks. Common in Bagley Wood and in coppices about Boar's Hill and Wootton. Bucks, Northants! Gloster, Warwick.

L. vernalis, D C. *Small Hairy Wood Rush.*

L. pilosa, W. *Juncus pilosus*, Huds. (*Sib.*)

Top. Bot. 435. Syme, E. B. x. 5. 1548. Nym. 752.

Native. Sylvestral. Woods and thickets. Not uncommon. P. April, May.

First record, *Sib.* 1794.

2. Ouse. Tusmore.

4. Ray. Noke and Stow Wood, *H. Bos.* Beckley Copse, *H. E. Garnsey.*

5. Isis. Stonesfield, Wychowood, Ditchley, Lee's Rest.

6. Thame. Brasenose College Wood, *H. E. Garnsey.* Shotover.

7. Thames. Goring, Checkendon.

Berks. Bagley, Wootton, Tubney.

L. Forsteri, D C.

Top. Bot. 435. Syme, E. B. x. 4. 1547. Nym. 752.

Native. Sylvestral. Dry woods. Local. P. April, May.

First record, *W. Baxter*, 1831, May 31.

7. Thames. Beech Wood about a mile and a-half from Henley, near road to High Wycombe, *Bz.* College Wood, Checkendon, Chinnor, Sunley Wood.

Berks. Streatley, Bisham, Quarry Wood. Bucks, Gloster W.

L. erecta, Desv.

L. multiflora, Lej.

Top. Bot. 435. Syme, E. B. x. 9. 1550. Nym. 752.

Native. Ericetal. Heaths, commons. Local. Rather rare. P. May, June.

First record, *Sib.* 1794. *Juncus campestris*, var. *elatior*.

3. Swere. Pin Hill, Neithrop, *A. Fr.*

4. Ray. Tackley Heath, Headington Wick.

5. Isis. Eynsham Heath, *Sib.* North Leigh Heath, *congesta*. Finstock Heath, Bruern Wood and *congesta*.

6. Thame. Bullingdon, *Sib.* North side Shotover, *Bz. congesta*.

7. Thames. Binfield Heath, *congesta*, Lej.

Berks. Bagley Wood, Wootton, Frilford, *congesta*.

L. campestris, D C. *Field Rush.*

Top. Bot. 753. Syme, E. B. x. 9. 1549. Nym. 752. *Bz.* 379.

- Native. Pascual. Fields and pastures. Common in all the districts.
 P. April, May.
 First record, *Sib.*, *Juncus campestris*.
 Both forms *umbellata* and *congesta* occur.

ORD. LXXXIV. AROIDEÆ, Juss.

ACORUS. L.

A. Calamus, L. *Sweet Flag.*

Top. Bot. 428. Syme, E. B. ix. 11. 1391. Nym. 754. Bx. 330.
 Native or denizen. Paludal. Riversides. Local. P. June-Aug.
 First record, *Sib.* 1794.

4. **Ray.** Mesopotamia, it was planted here by *Mr. Baxter*.

6. **Thame.** Dorchester, *Sib.*! Between Oxford and Iffley, and Iffley and Sandford, *Bx.*! in *Purton*. Thame River, *Bx.* Abundant by the Thame near Dorchester.

7. **Thames.** Banks of the Thames above Reading, Oxford side, *F. A. Lees*. Near Pangbourne, *Newb.*!

Berks. *Typha aromatica clava rugosa, nobis* circa piscinas et canales Honoratissimi et Maecenatis insignis, H. Comitibus de Clarendon apud Swallowfield in com. Bercher., *Morison*, iii. 275. Iffley, Sandford. Bucks, Marlow. Northants, planted. Warwick, planted.

ARUM. L.

A. maculatum, L. *Lords and Ladies. Cuckoo-pint.*

Top. Bot. 427. Syme, E. B. ix. 13. 1392. Nym. 755. Bx. 261.
 Native. Sylvestral. Woods, thickets, hedges. Common in all the districts, but owing to the trimming of hedgerows less frequent than formerly. P. April, May.
 First record, *Sib.* 1794.

The form with unspotted leaves is nearly as frequent as the type.

ORD. LXXXV. LEMNACEÆ, Dmrt.

LEMNA. L.

L. trisulca, L. *Ivy leaved Duckweed.*

Top. Bot. 426. Syme, E. B. ix. 17. 1394. Nym. 756.
 Native. Lacustral. Ponds, ditches, stagnant water. Not uncommon.
 A. June.

First record, *Sib.* 1794.

3. **Swere.** Ditch beyond Mill Meadow. Cherwell near Grimsbury, *Bees*.

4. **Ray.** Otmoor, Bicester, Kirtlington.
 5. **Isis.** Port Meadow, Wolvercote, *Bx.* / Blenheim, *Rogers* / Binsey, Osney, Christ Church Meadow.
 6. **Thame.** Waterstock, *A. Fr.* Tetsworth.
 7. **Thames.** North Stoke, Caversham.
- L. minor, L.** *Common Duckweed.*
 Top. Bot. 486. Syme, E. B. ix. 17. 1394. Nym. 756.
 Native. Lacustral. Ditches, ponds, etc. Abundant in all the districts.
 A. June, July.
 First record, *Sib.* 1794.
- L. gibba, L.**
 Top. Bot. 425. Syme, E. B. ix. 22. 1396. Nym. 756.
 Native. Lacustral. Ponds and ditches. Local. A. July, Aug.
 First record, *Sib.* 1794.
3. **Swere.** Ditch beyond Mill Meadow, *Bees.* With flower, *A. Fr.* 1868. In Grimsbury Wharf, *A. Fr.*
 4. **Ray.** Marston, Otmoor.
 5. **Isis.** Ditch in Christ Church and Merton Meadow, *Bx. in Purton.* Wolvercote.
 6. **Thame.** Thame, *Hb. Bx.*
- Berks.** Kennington, *H. E. Garnsey.*
- L. polyrrhiza, L.** *Greater Duckweed.*
Spirodela polyrrhiza, Sch.
 Top. Bot. 426. Syme, E. B. ix. 23. 1397. Nym. 456.
 Native. Lacustral. Ponds, ditches. Not uncommon. A. July (*Sib.*).
 First record, *Sib.* 1794.
3. **Swere.** With *L. trisulca* and *gibba*, *Bees.*
 4. **Ray.** Otmoor, Marston, Magdalen College Meadow.
 5. **Isis.** Ditch in Christ Church and Merton Meadow, *Bx. in Purton.* Binsey, Wolvercote, Port Meadow.
 6. **Thame.** Waterstock, *A. Fr.*
 7. **Thames.** North Stoke, Saunders' Green.
- Berks.** Radley.

ORD. LXXXVI. TYPHACEÆ, D C.

TYPHA. L.

- T. latifolia, L.** *Bullrush. Reed-mace.*
 Top. Bot. 429. Syme, E. B. ix. 2. 1385. Nym. 757.
 Native. Paludal. Marshes, ponds, ditches. Rather common. P. June, July.
 First record, *Sib.* 1794.

2. Ouse. Hardwick, Hethe.
 3. Swere. Cropredy, Crouch Hill, Drayton Brook, Clifton Wharf, Canal by Hardwick, *T. Bees*.
 4. Ray. Headington Wick Copse, *Sib.* Bicester, Tackley, Heyford. Plentiful by railside between Bicester and Islip.
 5. Isis. Wolvercote, *H. Bos.* Port Meadow, near Yarnton, Freeland, Wychwood, Bladon, North Leigh.
 6. Thame. Pond between the Minchery and Sandford, *Walk.* Rycote, *Bz.* Shotover Brickyards, Stanton Quarries, Holton Quarries.
 7. Thames. Saunders' Green, Caversham.
- This plant has a great partiality for the pools in old brickyards.

***T. angustifolia*, L.**

Syme, E. B. ix. 3. 1386. Nym. 757. Bz. 377.

Native. Paludal. Riversides. Rare. P. June, July.

First record, *Sib.* 1794.

3. Swere. [Wormleighton Reservoir, *A. Bees.*] *Top. Bot. Bees. list*, but the locality is in Warwickshire, hence the record in *Top. Bot.* is erroneous.
 4. Ray. Banks of Cherwell near King's Mill and Marston, *Rev. Mr. Huntley* in *Walk.* Ambrosden Fish-pond, *G. Woodward, Esq.* A variety with leaves nearly half-inch broad between Oxford and Marston, *Bz.* Cherwell near Summertown, *H. Bos.* Cherwell side between Marston Ferry and Islip, tall plant six feet high, very broad leaves, usually barren.
 6. Thame. Cowley near the London Road, *Sib.* Between Sandford and Nuneham, *Bz.*
- Berks. Pond at Cumnor, *Bz.* Northants, Gloster E., Warwick.

SPARGANIUM. L.

***S. ramosum*, Curt.** *Great Bur-Reed.*

Syme, E. B. ix. 6. 1387. Nym. 758. Curt. Fl. Lond. 342.

Native. Paludal. River-, brook-, and canalside. Not uncommon. P. June, July.

3. Swere. Clattercut.

4. Ray. Brookside between Marston and Wood Eaton. Cherwell side near Marston Ferry, Otmoor.

5. Isis. Canalside near Duke's Lock, above Wolvercote.

***S. neglectum*, Beeby.** *Journ. Bot.* July, 1885.

Native. Paludal. River-, brook-, and canalside. Common. P. June-Aug.

First record, *the Author*, 1885.

3. Swere. Cropredy, Swalecliffe, Tadmarton.

4. **Ray.** Otmoor, Bicester, Merton, Noke, Marston.

5. **Isis.** Wolvercote.

6. **Thame.** Cowley, Iffley.

Berks. South Hinksey, Cumnor.

The aggregate, *S. ramosum*, Huds., was first recorded by Sibthorp, and is common and generally distributed. The plant has only recently been found to include the two preceding species, whose distribution in the county is only imperfectly worked out. So far *neglectum* appears to be the commoner plant.

S. simplex, L. *Bur-Reed.*

Top. Bot. 429. Syme, E. B. ix. 7. 1388. Nym. 758. Bx. 276.

Native. Lacustral. Ponds, canals, and streams. Rather common.

P. July.

First record, *Sib.* 1794.

3. **Swere.** Brooks and canals, *T. Bees.* March 3, *Gull.* Little Bourton, *A. Fr.* Clattercut.

4. **Ray.** Otmoor, *Sib.* Magdalen College Meadow in full flower, *Bx.* Common about Oxford, *Bx.* Heyford, Kirtlington, etc.

5. **Isis.** Port Meadow, Christ Church Meadow, *Bx.* Woodstock, *H. Bos.* Witney, Wychwood, Wolvercote, Handborough.

6. **Thame.** *Hb. Bx.* Iffley.

7. **Thames.** Sonning, *Hb. Budge.*

Berks. Marcham, Sandford.

Occurs frequently in a barren state in rivers and canals, and once found with floating leaves and flowering.

[*S. minimum*, *Fr.* Warwick, rare.]

ORD. LXXXVII. CYPERACEÆ, D C.

SCHENUS. L.

S. nigricans, L. *Bog Rush.*

Top. Bot. 436. Syme, E. B. x. 43. 1529. Nym. 760. Bx. 268.

Native. Uliginal. Bogs and marshes. Rare. P. June.

First record, *Dr. Lightfoot*, 1780. 'Near Oxford in bogs.'

4. **Ray.** In boggy ground going from Oxford to Stanton by way of Headington, about four miles from Oxford, *Dr. Lightfoot*, *MSS.*, i.e. Headington Wick, which is given in *Sib.* 1794, and where it is still abundant. Weston Peat Pits, *W. Wilson Saunders*, 1839. *H. Bos.* 1861.

Berks. Frilford. **Warwick**, extinct. **Northants** plentiful at Wittering Marsh.

[*Cladium Mariscus*, *Br. C. germanicum*, Sch. **Northants**, extinct. **Warwick**, extinct.]

RHYNCOSPORA. Vahl.**Rh. alba, Vahl.**

Syme, E. B. x. 46. 1582. Nym. 761.

Native. Paludal. Grassy meadows. Very rare. P. July, Aug.

First record, *the Author*, 1884.

5. Isis. On Wolvercote Common. Very rare.

Berks. Sonningwell, *Dr. Lightfoot*, 1762. Meadows between South Hinksey and Abingdon Road, *Bolton King*, very rare! Warwick, very rare.**ERIOPHORUM. L.****E. latifolium, Hoppe.** Cotton Grass.

Top. Bot. 447. Syme, E. B. x. 75. 1608. Nym. 761.

Native. Uliginal. Marshes and bogs. Rare. P. May, June.

First record, *Mr. Baxter*, 1830, *E. pubescens*.4. Ray. Bogs near Stow Wood; near Headington Wick Copse, *Bx*.6. Thame. Bullingdon, *Hb. Lawson!*Berks. Tubney, *Rep. of Rec. Club*, 1881. Frilford. Northants, Wittering.**E. angustifolium, Rth.** Cotton Grass.*E. polystachion, L.*

Top. Bot. 447. Syme, E. B. x. 73. 1605. Nym. 761.

Native. Bogs, marshes. Local. P. May, June.

First record, *Sib.* 1794.3. Swere. Brookside in Drayton Lane, *Gull*. Bog south of Shutford Bridge, Milcomb Hill, *Bees*.4. Ray. Upper Heyford, Stow Wood, *Bx*. Behind Headington Hill, *Sib.* Between Kirtlington and Tackley plentiful. Headington Wick Bog.

5. Isis. Near Little Faringdon.

6. Thame. Bullingdon Green, *Sib.* / Thame, *Hb. Bx*.

Berks. Frilford, near Sandford.

[*E. vaginatum, L.* Syme, E. B. x. 71. 1604. Nym. 762. *Bx*. 427.Marshes at Headington, *Dr. Maton* in *Bot. Guide*, also Oxford in *Sm*.*Eng. Fl.* is now extinct.

Gloster E. (?) Warwick, rare.]

ELYSMUS. Panz.**E. compressus, Panz.** *Scirpus Caricis, Retz.* *S. caricinus, Sch.*Top. Bot. 23 (?) Syme, E. B. x. 48. 1503. Nym. 763. *Bx*. 308, from an Oxford specimen.

Native. Paludal. Wet heathy places. Very local and rare. P. June.

First record, *Mr. Baxter*, 1831.

4. Ray. Cherwell side near Marston, *Patey*! very fine specimens, 1885.
 5. Isis. By a stream in Wychwood Forest, *T. Westcombe*, about 1840. After an interval of forty-five years the Author again met with this species in marshy places in Wychwood Forest growing close to *Bartramia*.
 6. Thame. Under Bullingdon Green, *Bx.*, from whence specimen figured in *Bast. Br. Plants* was obtained. Shotover, *Hb. Bx.* June 15, 1831. *Rev. E. Fox* saw it at Bullingdon about 1855.
- Berks. Between South Hinksey and the Abingdon Road. Between old and new road going to Eynaham, *W. Bx.* 1831. Northants, Foxhall, very rare. Gloster E.

SCIRPUS. L.

S. sylvaticus, L. *Wood Club Rush.*

Top. Bot. 440. Syme, E. B. x. 69. 1602. Nym. 763.

Native. Paludal, etc. Woods and marshy places. Rare. P. July.

First record, *Blackstone*, 1737. *Gramen Cyp. millicaeus*, Ger. Em.

3. Swere. Canalside, *Gull.* Hanwell, Cherwell towards King Sutton, abundant, *T. Bees.* Twyford, Great Tew, *A. Fr.*

5. Isis. Heythrop Woods, *Sib.* In a pond at Walcot, *Blacks. MSS.* Near Wilderness in Sir R. Jenkinson's garden at Walcot, near Charlbury, *Blacks. Spec. Bot.*

Berks. *Cyp. long. latifol. locustis plurimis minoribus et brevioribus miliac.*, C. B. P. prope Hinksey haud longe ab Oxonio ad ripas fluvii Thamisis, *Morison!* Sonning, *Brit.* Bucks, Northants, Gloster E., Warwick.

[*S. maritimus, L.*

Near Marcham, Berks, native. Gloster W., Warwick, another, native inland station.]

S. lacustris, L. *Bullrush.*

Top. Bot. 439. Syme, E. B. x. 63. 1596. Nym. 764.

Native. Lacustral. Rivers, ponds, canals. Common in all the districts. P. June, July.

First record, *Sir Jos. Banks*, 1760, near Oxford.

A small peculiar form occurred on mud dredged from the river at Osney in 1884.

[*S. Tabernæmontani, Gmel.* Southam and Itchington Holt, Warwick.]

[*S. caespitosus, L.*

Berks, Warwick, Gloster E.]

S. pauciflorus, Light.

Top. Bot. 444. Syme, E. B. x. 54. 1589. Nym. 765.

Native. Paludal. Marshes. Rare. P. July, Aug.

First record, *Sib.* 1794.

4. **Ray.** Headington Wick, *H. Bos.* 1860 | 1884. Bog near Stow Wood, Marston Fields.

6. **Thame.** Bullingdon Green, *Sib.* 1884.

Berks. South Hinksey, see *Rep. of Rec. Club*, 1880. Bucks, Northants, Gloster W., Warwick, very rare.

ISOLEPIS. Br.**I. setacea, Br.**

Top. Bot. 442. Syme, E. B. x. 60. 1594. Nym. 766.

Native. Uliginal. Marshy places or gravelly soil. Local and rare. July.

First record, *Sib.* 1794. *Scirpus setaceus, L.*

3. **Swere.** Below waterfall Wroxton Park, *Bees.*

4. **Ray.** Bog under Stow Wood.

5. **Isis.** Wolvercote, *H. Bos.* North Leigh Heath, Finstock Heath, Fifield Heath.

6. **Thame.** Shotover, *Sib.*, do. 1884. Cowley Field near roadside, *Sib.* Bullingdon, railside near Wheatley, north side of Shotover by the Brickyards.

Berks. Wootton, *H. Bos.* Frilford. Bucks, Northants, Gloster, Warwick. Given unlocalised in Walker's Flora.

[H]ELEGITON. Lk.**[H]E. fluitans, Lk. Floating Club Rush.**

Top. Bot. 446. Syme, E. B. x. 57. 1592. Nym. 766. *Isolepis fluitans, Br.*

Native. Pools on heaths. Extremely rare. P. June.

First record, *Sib.* 1794. *Scirpus fluitans.*

5. **Isis.** South Leigh Heath, *Sib.* After ninety years had elapsed without any further record of this plant, the Author found it on North Leigh Heath in 1884. South Leigh Heath or Common has entirely disappeared.

Berks. Bucks, Gloster W., Warwick.

HELEOCHARIS. Br.**H. palustris, Br.**

Top. Bot. 443. Syme, E. B. x. 51. 1586. Nym. 767. Bx. 436.

Native. Paludal. Shallow ponds, wet meadows, marshy places. Common and generally distributed. P. June, July.

First record, *Sib.* 1794. *Scirpus palustris, L.*

[? *H. uniglumis*, *Schult.* .

Berks. Botley, *Dyer*.

This is included in Britten's contribution to a Berkshire Flora, but it is quite likely that the locality was in Oxfordshire. As yet I have not met with it.]

H. multicaulis, *Sm.*

Top. Bot. 444. Syme, E. B. x. 53. 1588. Nym. 767.

Native. Paludal. Marshes. Very rare. P. July, Aug.

First record, Top. Bot. '*Boswell*,' 1874.

4. Ray. Headington Wick, Stow Wood, *H. Boswell*. Marston.

5. Isis. Port Meadow, *Rev. R. Linton*.

6. Thame. Riverside two miles from Thame, *A. Fr.* Bullingdon

Bog, wet peaty soil, see *Rep. of Rec. Club*, 1880.

Warwick very rare. Gloster, Kelmscott. Berks.

H. acicularis, *Sm.* *Slender Club Rush. Scirpus acicularis*, L.

Top. Bot. 442. Syme, E. B. x. 50. 1585. Nym. 767.

Native. Paludal. Marshes, canal borders. Local. P. July, Aug.

First record, *Plot. Juncellus omnium minimus capitulis Equiseti*, 1677, and new to Britain.

4. Ray. Canal near Kidlington, abundant.

5. Isis. Binsey Common! *Plot*, also in *Rays's Syn.* i, ii, and iii, *Martyn*, *Gough*, etc. Near Eynsham Bridge, *Sib.* Port Meadow near Medley Lock, Canalside from Oxford to Wolvercote, *Bx.* Port Meadow, *Rev. R. Linton*! Blenheim Park! *T. Westcombe*. Very abundant in a submerged state in the canal between Hythe Bridge Street and Wolvercote. The tow-ropes disturb it, and it may be found in a floating state on the lower river. Plentiful in a pond near Duke's Lock. I have never seen the submerged state in flower.

7. Thames. Binfield Heath.

Berks. Bulmershe Heath. Bucks, Northants, Gloster E., Warwick.

CAREX. L.

C. Pseudo-cyperus, L.

Top. Bot. 467. Syme, E. B. x. 163. 1675. Nym. 767.

Native. Paludal. Marshes, ditch- and pondsides. Rare. P. May, June.

First record, *W. Baxter*, 1831.

3. Swere. Hanwell Plantation, Canal near Twyford, *A. Fr.*

4. Ray. Magdalen College, pond in meadow, *H. E. Garnsey*. Kidlington, *H. Bos.* Heyford, *Rev. E. Fox*.

5. *Isis*. Ditch-bank at foot of bridge in Binsey Lane, *Bz.* Ditch in Christ Church Meadow, 1851, *Bz.*

6. *Thame*. Rycote Park, *Bz.*

7. *Thames*. Binfield Heath.

Berks. In *Bercheria*, *Morison*, 242. Kennington Lane, plentiful, Binsey, Radley. *Bucks*, Northants, Gloster W., Warwick.

***C. riparia*, Curt.**

Top. Bot. 471. Syme, E. B. x. 167. 1679. Nym. 767.

Native. Paludal. River-, canal-, and ditch-sides. Abundant in all the districts. P. May.

First record, *Sib.* 1794.

Very variable. The spikes have sometimes a mixed inflorescence, being all subfemale; others occur with male flowers on the summit of each spikelet. The spikelets vary remarkably in shape, and the glumes also in length, sometimes being so short as to barely cover the fruit; occasionally they become extremely developed. The fruit also varies in shape and colour—probably there are two or three species 'lumped' in our *riparia*.

***C. paludosa*, Good.**

Top. Bot. 470. Syme, E. B. x. 165. 1678. Nym. 768.

Native. Paludal. River-, pond-, and ditch-sides, wet woods, etc. Generally distributed, but much less common than *riparia*. P. May, June.

First record, *Sib.* 1794. *C. acuta*, Curt. non Linn.

'Behind Headington Hill, banks of the pond Magdalen Meadow.'

Var. *Kochiana*, Gaud. 'Glumes with a long rough awn.'

4. *Ray*. Cherwell side.

In Headington Wick a peculiar form occurred which Arth. Bennett tells me is an analogous form to that occurring in *C. vesicaria*, i.e. *pendulina*, Blytt. *C. paludosa* is very variable.

***C. vesicaria*, L. Bladder Sedge.**

Top. Bot. 470. Syme, E. B. x. 170. 1682. Nym. 768.

Native. Paludal. Brook- and ditch-sides, wet meadows. Sparingly distributed. P. May, June.

First record, *Gr. cyper. majus præcox spicis turgidis teretibus flavescensibus*, ad rivulos, sed rarius observatur. *Morison*, iii. 242 (*Bobart*) 1699.

4. *Ray*. Banks of the Cherwell, *Sib.* The Parks, *Hb. Lawson*. Otmoor!

A. Fr. Kidlington, Addison's Walk, *H. Bos.* Fencott, *Rev. Moyle Rogers*. Bicester, towards Blackthorn, Merton, Marston.

5. *Isis*. 'In ambulacris Coll. *Ædis Christi*,' *Bobart*! Binsey Lane, Port Meadow, Cornbury, near Eynsham, near Yarnton.

6. *Thame*. Cowley field, *Sib.* Bullingdon Bog, *Bz.* Between Oxford and Iffley, *Bz.*!

Berks. Sandford, Iffley, Binsey. Northants, rare. Gloster E., Warwick.

C. rostrata, Stokes. *Bottle Sedge. Beaked Sedge.*

C. ampullacea, Good.

Top. Bot. 469. Syme, E. B. x. 169. 1680. Nym. 768.

Native. Paludal. Marshes and bogs. Local, decreasing. P. June.

First record, *Gram. cyp. medium angustifol. spicis teretibus erectis flavescentibus*. In paludibus et aquosis juxta Oxoniam v. g. apud Hockley alisque consimilibus provenit. *Bobart. Morison*, iii. 243. 1699.

3. **Swere.** Bull's Pond, Drayton, *A. Fr.*

4. **Ray.** Under Headington Wick Copse, *Sib.* / Abundant in Weston Peat Pits, *W. Wilson Saunders!* Magdalen College Meadows, *H. E. Garnsey.* Abundant in marsh between Kirtlington and Tackley.

6. **Thame.** Hockley (Bullingdon), *Bobart!* *Sib.* / 1885. Beyond Iffley on the banks of Isis, *Sib.*

Berks. Shadwell Copse, *H. Bos.* Frilford. Bucks, Northants, Gloster, Warwick.

Oxford references are contained in *Sm. Fl. Br.*, *Sm. Eng. Fl.*, *Bot. Guide*, etc., but they only repeat *Bobart's* record.

C. hirta, L. *Hairy Sedge. Hammer Sedge.*

Top. Bot. 469. Syme, E. B. x. 161. 1677. Nym. 768.

Native. Paludal, etc. Moist meadows, bogs, ditch-sides, roadsides, etc. Common. P. April-June.

First record, *Sib.* 1794.

Occurs in all the districts; plentiful in Mesopotamia, Christ Church Meadow, etc.

I have failed to detect the glabrous glumed form.

At North Leigh it grew in a deep ditch and was then over four feet high with the spikes compound at base, but it exhibited no other variation from type.

C. pendula, Huds.

Top. Bot. 466. Syme, E. B. x. 139. 1660. Nym. 768.

Native. Septal. Woods, hedges. Rare. P. June, July.

First record, *Sib.* 1794.

5. **Isis.** Tar Wood, *Sib.* Godstow, *H. Bos.* / Binsey, *W. Whitwell.* South Leigh.

Berks. Hinksey, *Morison*, iii. 242! Botley, Cumnor, *H. Bos.* / Wytham, Eng Wood. Bucks, Northants, Gloster, Warwick.

C. sylvatica, Huds. *Wood Sedge.*

Top. Bot. 466. Syme, E. B. x. 144. 1665. Nym. 769.

Native. Woods, hedges, etc. Common in all the districts. P. May.

Occurs in Marston Lane.

First record, *Sib.* 1749.

C. strigosa, Huds. *Loose Sedge.*

Top. Bot. 466. Syme, E. B. x. 142. 1661. Nym. 769.

Native. Sylvestral. Woods. Very rare. P. June.

First record, *Sib.* 1794.

4. **Ray.** Noke Wood, *Sib.*

Berks. In sylva Witham dicta prope Oxon, *Dr. Sheffield, Goodenough's Carices; Trans. Linn. Soc.* 1794.

'My friend Dr. Jno Sibthorp has lately discovered this plant in another situation in the neighbourhood of Oxford.' See also *Withering, New Bot. Guide, Gough*, etc.

There is no more recent record.

[*C. lævigata, Sm.* In the first marsh near the path, *Gulliver's Banbury List*. It is almost certainly an error. It is not there now.

Berks. Windsor Great Park, Wytham. Warwick, rare.

C. binervis, Sm.

Syme, E. B. x. 147. 1667. Nym. 770.

Native. Uliginal, etc. Marshes, bogs, wet roadsides, etc. Local, rather rare. P. April-June.

First record, *Sib.* 1794, sub nom. *C. distans*, which has not been found in Oxford.

2. **Ouse.** Roadside near Mixbury.

4. **Ray.** Headington in Copse, *W. T. Dyer*, 1864, *Hb. Br. Mus.*! Roadside Beckley.

5. **Isis.** Bruern Wood.

6. **Thame.** Cowley Marsh! Bullingdon Green! *Bx.* sub nom. *C. distans*. Near Warneford Asylum, South side of Shotover, *H. Bos.* Bullingdon Peat Bog, see *Rep. of Rec. Club*, 1880.

Berks. Boar's Hill, Happy Valley. Bucks, Gloster E., Warwick.

C. Hornschuchiana, Hoppe. *C. fulva, Good.*

Top. Bot. 462. Syme, E. B. x. 153. 1670. Nym. 771.

Native. Uliginal. Bogs, marshes. Local and rare. P. May.

First record, *H. Boswell*, 1870. Probably this was included in Sibthorp's *C. distans*.

4. **Ray.** Bog under Stow Wood! Headington Wick! *Phyt.* 4. p. 100, *H. Bos.* Weston Peat Pits.

6. **Thame.** Bullingdon Green, *H. Bos.* 1870! 1885.

Berks. Boar's Hill.

[*C. distans, L.* Warwick, Honington, Itchington, etc. Gloster W.]

C. flava, L. *Yellow Sedge.*

Top. Bot. 459. Syme, E. B. x. 156. 1672. Nym. 770.

Native. Uliginal. Marshes, bogs, wet heaths. Local, rather rare.

P. May, June.

First record, *Gramen palustre echinatum* J. B., brookside, Cornbury Quarry, Blackstone, 1737.

2. Ouse. Ardley, W. Mathews.

3. Swere. Wroxton Mill, T. Bees.

4. Ray. Bogs under Stow Wood, Headington Wick, H. Bos. / Upper Heyford, Bz. Weston Peat Pits, railside near Bicester.

5. Isis. Cornwell Pits, T. Bees. Ramsden Heath, T. Westcombe. Wychwood plentiful, Finstock Heath, North Leigh, Kelmscott.

6. Thame. Bullingdon Green, Bz. Cowley, H. E. Garnsey. Shotover, Bullingdon, *lepidocarpa*, T., Rep. of Rec. Club, 1880.

7. Thames. Binfield Heath. Most of the above record refer to *lepidocarpa*, Tausch, see Syme, E. B. x. 159. 1673. The true *flava* has been noticed at Headington Wick, Bullingdon, Grafton Common, Otmoor, etc., and intermediates are also frequent.

Berks. Shadwell Copse, H. Bos. Bagley, Rep. of Rec. Club, 1881, *eu flava*. Eng Wood, Frilford Marsh, *eu flava*. Bucks, Northants, Gloster E., Lechlade. Warwick.

? *C. Oederi*, Ehrh.

Syme, E. B. x. 157. 1674. Nym. 771.

Recorded by Mr. Beesley from Cornwell Pits, near Chipping Norton. I have not seen spec.; it was probably *C. lepidocarpa*.

[*C. digitata*, L. Gloster E.]

C. præcox, Jacq. Vernal Sedge.

Top. Bot. 468. Syme, E. B. x. 129. 1655. Nym. 773.

Native. Ericetal. Heaths, dry banks, dry fields, etc. Not uncommon.

P. April, May.

First record, Sib. 1794.

3. Swere. Cherwell side Banbury, Bretch, A. Fr. Hanwell, Bees.

4. Ray. Noke, Beckley, Stow Wood, Kirtlington.

5. Isis. Wychwood, Ditchley, Wootton, Finstock Heath, North Leigh Heath.

6. Thame. Shotover, Sib. Nuneham, H. Bos. seems rare. Open Magdalen, H. E. Garnsey. Holton.

7. Thames. Lewknor, A. Fr. Nuffield, Ibstone, Chinnor, Binfield.

Berks. Streatley, Boar's Hill, Bagley.

C. pilulifera, L. Pill-headed Sedge.

Top. Bot. 468. Syme, E. B. x. 127. 1653. Nym. 774.

Native. Ericetal. Heaths, peaty ground. Rather rare. P. April, May.

First record, Sib. 1794.

1. Stour. Tadmarton Heath, Bees., rare.

3. Swere. Drayton Brook, T. Bees. Epwell Heath.

4. **Ray.** Noke.

5. **Isis.** North Leigh Heath, *Sib.* / Ramsden Heath, *T. Westcombe*.
Finstock Heath, Wychwood, Bruern Wood.

6. **Thame.** Shotover, *Bx.* in *Purton*! Cowley Bog, *H. E. Garnsey*.

7. **Thames.** Mongewell, Binfield, Nettlebed, Lewknor, Ibstone.

Berks. Bagley, Wootton, *H. Bos.* Streatley.

With long acute glumes at Binfield.

C. glauca, Murr.

Top. Bot. 467. Syme, E. B. x. 117. 1644. Nym. 774. *Bx.* 440.

Native. Pascual, etc. Roadsides, pastures, downs, etc. Common and generally distributed. P. May, June.

First record, *Sib.* 1794. *C. recurva*, Huds.

Var. *C. Micheliana*, Sm. Syme, E. B. 1645.

7. **Thames.** Lewknor, *A. Fr.* Chinnor.

Var. *C. stictocarpa*, Don. Syme, E. B. 1646.

7. **Thames.** Lewknor, *A. Fr.*

A very variable plant, including two or three well-marked forms.

The lower spikes are not unfrequently compound.

C. pallescens, L. *Pale Sedge.*

Top. Bot. 461. Syme, E. B. x. 132. 1657. Nym. 774.

Native. Sylvestral. Woods, shady places. Local and rare. P. May.

First record, *Gr. cyp. spicis brevibus congestis folio moll.*, *Blackstone*,

1737.

3. **Swere.** Bog south of Shutford Bridge, *T. Bees*.

4. **Ray.** Stow Wood, *H. Bos.* Headington Copse, Wick Copse, *Bx.*
Beckley.

5. **Isis.** Wychwood, sparingly, *Blackstone*! 1885. Bruern.

6. **Thame.** Copse under Shotover, *Sib.* Bullingdon, *H. Bos.*

Berks. Bagley! Boar's Hill, *H. Bos.* Wytham.

The Wychwood and Beckley plants were *C. undulata*, K. hardly deserving a varietal name.

Bucks, Northants, Warwick.

C. panicea, L. *Pink Sedge.*

Top. Bot. 464. Syme, E. B. x. 133. 1658. Nym. 775.

Native. Paludal. Wet meadows, bogs. Local, rather rare. P.
May, June.

First record, *Sib.* 1794. Probably Merrett's '*Gr. Cyperoides spicatum*.
In a bog a mile westward from Oxford' is this, but the locality would be in
Berkshire.

3. **Swere.** Hanwell, not uncommon, *Bees*. Hardwick, Banbury, *A. Fr.*

4. **Ray.** Stow Wood, Headington Wick! Cherwell side above the

Crescent, *H. Bos.* Weston Peat Pits, near Stow Wood, railside near Bicester.

5. *Isis.* North Leigh, Finstock Heath, Ramsden Heath, Wychwood.
6. *Thame.* Bullingdon Green! not uncommon about Oxford, *Bx.* South side of Shotover! *H. Bos.* Cowley Marsh, *H. E. Garnsey.*
7. *Thames.* Caversham, *F. Tufnail.* Binfield, Chinnor Hill, South Stoke.

Berks. Foxcombe Hill, Bagley.

? *C. stricta*, Good.

Syme, E. B. ix. 108. 1638. Nym. 776.

Native (?). Marshes. Very rare.

5. *Isis.* Near Chipping Norton, *T. Bees.*

Gloster E., Northants, Warwick, very doubtful.

I have doubts as to the correct identity of this.

C. acuta, L.

Top. Bot. 458. Syme, E. B. x. 110. 1639. Nym. 777.

Native. River-, canal-, pondsides, marshes, etc. Abundant about Oxford, the most frequent sedge after *riparia*. P. May.

First record, *Sib.* 1794. *C. gracilis*, Curt.

Var. *C. viridis*, Hart. This variety new to Britain occurs by the Canal near Port Meadow. The glumes are shorter than in the typical plant. Very variable, a form from Headington Wick is closely allied to, if not identical with, var. *gracilescens*, Alm. A caespitose form also occurs. The sheaths of the young plants are filamentous, as pointed out by the Author in *Journ. Bot.*, Oct. 1884, p. 302.

C. vulgaris, Fr. *C. Goodenovii*, Gay.

Top. Bot. 459. Syme, E. B. x. 114. 1643. Nym. 777.

Native. Paludal. Marshes. Local, not very common. P. May.

First record, *Gr. cyp. foliis caryophyll. spicis. erectis sessilibus, e seminibus confertis compositis*, Ray. *Blackstone*, 1737.

3. *Swere.* First March, Shutford Bog, Bees. '*caespitosa*.' Banbury, A. Fr.

4. *Ray.* Near Hampton Poyle, *H. Bos.* Headington Wick.

5. *Isis.* Port Meadow, Witney, *H. Bos.* Wychwood, *Blackstone!* North Leigh.

6. *Thame.* Bullingdon Green! *Sib. caespitosa.* Shotover! Nuneham, *H. Bos.* Cowley, *H. E. Garnsey.*

7. *Thames.* Binfield, South Stoke.

Berks. Boar's Hill, Frilford.

Var. *uliginosa*, Syme. Marshside between Bicester and Islip.

Two or three forms occur, one a compact plant with larger fruit and shorter glumes from North Leigh Heath is worth further study.

***O. leporina*, L.** ***C. ovalis*, Good.**

Top. Bot. 450. Syme, E. B. x. 103. 1634. Nym. 779.

Native. Ericetal, etc. Moist heaths, marshes. Rather scarce. P.

May, June.

First record, *Sib.* 1794.

3. Swere. Hanwell, Crouch Hill, not uncommon, *T. Bees* Shutford, Epwell.

4. Ray. Piddington.

5. Isis. South Leigh Heath, *Sib.* North Leigh, Bruern Wood.

6. Thame. Bullingdon Green, *Sib.* Between Headington Quarry and Shotover, near the footpath, *Bz.* North side of Shotover, plentiful, ♦Wheatley railside.

7. Thames. Bledlow, Nettlebed, *A. Fr.* Binfield.

Berks. Boar's Hill, Wootton, Wytham.

Var. *bracteata*, Syme. *C. argyrolochin*, L. C. 1867 non Horn.

5. Isis. Bladon Woods, see *Rep. of Rec. Club*, 1880. Bruern Wood.

[*C. elongata*, L. Hampton in Arden, Warwick.]

***O. echinata*, Murr.**

C. stellulata, L. Top. Bot. 450. Syme, E. B. x. 95. 1626. Nym. 780.

Native. Uliginal. Bogs, wet heaths. Local and rare. P. June.

First record, *Sib.* 1794.

3. Swere. Bog south of Shutford Bridge, boggy field at Upton, *T. Bees*.

4. Ray. Between Bicester and Middleton Stoney, 'the cross roads,' *A. Fr.* Stow Wood! *H. Bos.*

5. Isis. South Leigh Heath, *Sib.* Finstock Heath, North Leigh Heath, Ramsden Heath.

6. Thame. 'Bullingdon Bogs' *Sib.* North side of Shotover, *Bz.* South side of Shotover.

7. Thames. Binfield Heath.

Berks. Bagley, Boar's Hill, Frilford.

Probably Merrett's, 1667, '*Gr. Cyperoides spica echinata simplicis*. Two miles southwards from Oxford in the bogs,' belongs here if not to *C. dioica*.

***C. axillaris*, Good.** ***C. muricata* × *remota*, Rit.**

Syme, E. B. x. 97. 1628. Nym. 780.

Native. Paludal. Ditchside. Local and rare. P. May, June.

First record, *H. Boswell*, 1862.

4. Ray. Marston Lane, *Jour. Bot.* ix. p. 148. *Rep. of Rec. Club*, 1883; still there 1885.

7. Thames. Streamside near Bledlow.

Berks. Marcham, see *Rep. of Rec. Club*, 1883. Bucks, Bledlow, see *Rep. of Rec. Club*, 1883. Gloster W., Warwick.

[*C. Boeninghausiana*, *W. Warwick*, extinct.]

***C. remota*, L.**

Top. Bot. 451. Syme, E. B. x. 96. 1627. Nym. 780.

Native. Septal. Hedgesides in shady places, brook- and pondsides. Locally common. P. May, June.

First record, *Morison* 1699 and *Gr. cyp. angustifolium, spicis parvis sessilibus in foliorum alis*, R., *Blackstone*, 1737.

3. **Swere.** Ditchsides frequent, *T. Bees*. Canalside, Second March, *Gull*.

4. **Ray.** Marston Lane, *Sib.*! Parson's Pleasure, *T. Thurland*! Oxford, *Hb. Sir Joseph Banks*. Magdalen College Walks, *H. E. Garnsey*. Headington, railside near Merton, Noke.

5. **Isis.** Walcot Wilderness, plentiful, *Blacks*. Tar Wood! *Sib.* Binsey, *H. Bos.*! Wychwood, Wolvercote, North Leigh, South Leigh, Cornbury.

6. **Thame.** Quale ultra Ifley, *Bobart*. Marsh Baldon, *Hb. Lawson*. Cowley Marsh! *H. Bos.* Horsepath Lane, Wheatley.

7. **Thames.** Bledlow, Saunders' Green, Sunley Wood, Stoke Row.

Berks. South Hinksey, Marcham, Happy Valley.

A starved form, probably *C. tenella*, Sm. non Sch., occurred in Marston Lane and at Stoke Row, see E. B. xiv. 83.

***C. vulpina*, L.**

Top. Bot. 455. Syme, E. B. x. 91. 1623. Nym. 781.

Native. Paludal. Marshes, canal-, river- and ditchsides. Common, and after *riparia* and *acuta* the most frequent sedge. P. May-Sept.

First record, *Sib.* 1794.

The form *nemorosa*, Rebent. Reich. Exc. 411, is also frequent; it occurred near Blackthorn, Bicester, Marston, etc. A plant was observed in flower on Sept. 12, 1883. Intermediates or hybrids between this and *muricata* have been observed.

***C. muricata*, L.**

Top. Bot. 453. Syme, E. B. x. 93. 1624. Nym. 781.

Native. Paludal. Ditchbanks, canal-, and riversides, etc. Not unfrequent. P. June.

First record, *Sib.* 1794. *C. spicata*, Huds.

1. **Stour.** Tadmarton.

2. **Ouse.** Mixbury.

3. **Swere.** Canalside, Bridle Road near Bodicote, Twyford, Hanwell, Crouch Lane, Broughton Road, Spital Farm, *Bees*. Barford, Cropredy, *A. Fr.* Deddington.

4. **Ray.** Thrupp, Marston Lane, *H. Bos.* Bicester, Heyford, Kirtlington, railside near Bicester.
5. **Isis.** Woodstock, *H. Bos.* Port Meadow, *Rev. R. Linton.* Finstock, Stonesfield, Wychwood, North Leigh, Charlbury, Bruern.
6. **Thame.** Cowley, Littlemore, *Sib.* Iffley.
7. **Thames.** Goring, *H. Bos.* Woodcote, Grime's Dyke, Bledlow, Watlington, South Stoke.

Berks. Marcham, South Hinksey.

Var. pseudo-divulsa, Syme. ? *Var. virens*, Koch.

Apparently rare. Sparingly in a marsh near South Stoke.

C. divulsa, Good. *Grey Sedge.*

Top. Bot. 454. Syme, E. B. x. 94. 1625. Nym. 781.

Native. Septal, etc. Roadsides, dry banks, woods. Rare, except on the Chilterns. P. May.

First record, *Sib.* 1794.

4. **Ray.** Headington Wick, *H. Bos.*

6. **Thame.** Shotover, Nuneham.

7. **Thames.** Goring, *H. Bos.* Caversham, *Newb.* A common sedge on the Chilterns, as at Ewelme, Crowley, Binfield, Withy Coppice, Dunsden, Nuffield, near Stoke Row, etc.

C. paniculata, L.

Top. Bot. 456. Syme, E. B. x. 90. 1622. Nym. 781.

Native. Paludal. Pondsides, marshes, canalsides, etc. Local. P. May, June.

First record, *Sib.* 1794.

3. **Swere.** Bog between Wroxton and Drayton, pool near Drayton, *Gull.* Wroxton near Chinese Temple, bog south of Shutford Bridge, Canal just beyond Blue Barn; in Gulliver's stations it is extinct, *Bees.* Canalside common, Drayton, Bodicote, *A. Fr.* Somerton.

4. **Ray.** Headington Wick Copse, *Sib.* 1885. Osier beds below Cherwell near Enslow Bridge, *Mr. J. Saunders!* Between Ilip and Oddington, *Rev. Moyle Rogers.* Bayswater, Canalside between Upper Heyford and Kirtlington.

5. **Isis.** Cornbury pondsides, plentiful.

6. **Thame.** Bullingdon Green! *Sib.*, also *Bx.* in *Purton.* Cowley Marsh.

7. **Thames.** Mongewell near the river, *Hb. Lambert, Hb. Kew.*

Berks. Frilford. Northants, Gloster E., Warwick.

Very variable, a form with long spike and very distant spikelets occurred in Bullingdon Bog, and another with compound spikelets in Headington Wick.

[*C. teretiuscula*, *Good*.

Warwick, Sutton Park, var. *Ehrtiana*.]

C. disticha, *Huds.* *C. intermedia*, *Good*.

Top. Bot. 452. Syme, E. B. x. 85. 1617. Nym. 782.

Native. Paludal. Low meadows, etc. Common. P. May, June.

First record, *Sib.* 1794.

4. **Ray.** A variety with distant spikelets occurs in some plenty on a boggy piece of ground at west end of the great pond in Kirtlington Park is, I believe, the *C. uliginosa* of Suter, *W. Wilson Saunders*. Marston, Headington Wick, Otnoor, Mesopotamia, railside near Bicester, lax spiked form.

5. **Isis.** Blenheim, *Rogers*. Wolvercote, Binsey, *H. Bos.* North Leigh.

6. **Thame.** Bullington Green! *Bx.* Cowley, *H. E. Garnsey*. Near Iffley, *Dyer*. Shotover.

7. **Thames.** North Stoke, South Stoke.

Berks. Marcham, South Hinksey. Bucks, Northants, Gloster E., Warwick.

A lax as well as a form with closely aggregated spikelets occurs, and the fruits are sometimes abortive and enlarged.

[*C. curta*, *Good*. Virginia Water, *Brit.* Berks. Gloster W., Warwick, Sutton Park.

C. pulicaris, *L.* *Flea Sedge*.

Top. Bot. 449. Syme, E. B. x. 81. 1612. Morison, iii. 244. Nym. 783.

Native. Ericetal. Heaths and bogs. Rare. P. June.

First record, *Merrett*, 1667. *Gr. cyperoides pulicare*, 'a mile east from Oxford at Hockley of the Hole.'

3. **Swere.** Bog south of Shutford Mill, *Bees*.

4. **Ray.** Stow Wood! *H. Bos.* Headington Wick.

5. **Isis.** Finstock Heath, North Leigh.

6. **Thame.** Bullington Green, *Sib.* 1885. Shotover, *H. Bos.*!

Berks. Frilford, near Childswell Farm.

The North Leigh plant had very recurved leaves, simulating *rupestris* to some extent.

C. dioica, *L.*

Top. Bot. 448. Syme, E. B. x. 78. 1610. Nym. 784.

Native. Uliginal. Peat bogs. Rare. P. June.

First record, *Gr. cyperoides min. ranunculi capitulo rotundo*. Frequently found on the bogs on the west side of Oxford, *J. Bobart* in *Ray's Stirp.*, 1690 (probably in Berkshire). In *Morison*, 1699, it gives *Paludibus variis v. g. apud Hockley*.

4. **Ray.** Under Headington Wick Copse, *Sib.* 1885. Stow Wood, *H. Bos.*

6. **Thame.** Bullingdon Green (Hockley), *Bobart and Sib.* See *Rep. of Rec. Club*, 1880, still there in 1885.

Berks. Wootton, *H. Bos.* **Northants!** Gloster E., Warwick.

ORD. LXXXVIII. GRAMINEÆ, *Juss.*

SETARIA. *P. B.*

* *S. viridis*, *P. B.*

Cyb. Br. ii. 149. *Syme*, E. B. xi. 13. 1693. *Nym.* 786.

Alien. Waste places about Grimsbury Wharf, *A. Fr.*; is not this in *Northants?* Near Osney, 1885.

Northants, Warwick, Gloster.

* *S. glauca*, *P. B.*

Comp. Cyb. 592. *Nym.* 787.

Alien. A casual near Banbury Mill, 1869, *A. Fr.* Steeple Aston, *B. S. Ogle, Esq.*

* *S. verticillata*, *P. B.*

Cyb. Br. iii. 150. *Syme*, E. B. xi. 14. 1694.

Alien. A casual in turnip field near Iffley, 1884.

* *Echinochloa Crus Galli*, *P. B.*

Comp. Cyb. 591. *Syme*, E. B. xi. 12. 1692.

Alien. Waste places near Banbury Mill, 1868, *A. Fr.*

* *Panicum miliaceum*, *L.* *Nym.* 788.

Alien. Casual on waste ground near the Great Western Railway Station, Oxford.

ANTHOXANTHUM. *L.*

A. odoratum*, *L.

Top. Bot. 473. *Syme*, E. B. xi. 17. 1696. *Nym.* 790. *Bx.* 99.

Native. Pratal, etc. Meadows, pastures, woods, etc. Abundant. *P.* May, June.

First record, *Sib.* 1794.

Two forms occur, one with yellow, another with purple anthers, and there is also a lax spiked sylvestral plant. One with pubescent glumes and slightly scabrous stems is *A. villosum*, *Dum.*, it occurs occasionally with the type.

* ***A. Puellii*, *Lec.* and *Lam.***

Journ. Bot. xiii. 157. 1875, not very good figure. *Nym.* 790.

Sandy field with clover, Sonning. Oxon and Berks, *F. Tufnail.*

Introduced with grass seeds, but unless renewed it speedily dies out. See *Report of Rec. Club*, 1883.

Shotover with grass seeds 1884, not there in 1885.

Mr. Tufnail informs me that this, a much commoner species on the continent than *A. odoratum*, is sent us by the German seed-growers as a substitute for, and sometimes as, the perennial species; farmers in this country buying it of the wholesale houses in many cases for the *odoratum*, or in ignorance of the fact that for agricultural purposes it is comparatively worthless—being an annual. The receipt and dissemination of it throughout the country dates back a few years only, not much more than five or six, increasing as the supply of *odoratum* seed lessened, facts which give us the how and the why of its earlier occurrences, and still growing frequency, chiefly in the more highly cultivated county areas. It has really no higher claim than that of a casual, constantly renewed, for of itself it does not naturalise tenaciously, seldom appearing for more than two or three summers in the same field and soon dying out.—*F. A. Lees, Rep. of Rec. Club, 1883.*

PHALARIS. L.

P. arundinacea, L. *Common Reed Grass.*

Baldingeria, Dmrt. *Digraphis*, Trin. *Calamagrostis colorata*, Sib.

Top. Bot. 473. Syme, E. B. xi. 19. 1697. Nym. 791.

Native. Paludal. River-, ditch-, pond-, canal-, and brooksides. P. June, July.

First record, *Sib.* 1794.

Abundant in all the districts except the Stour, in which doubtless it occurs. The form *picta* was gathered by the riverside near Bablock Hithe as a native plant.

* **P. canariensis, L.** *Canary Grass.*

Comp. Cyb. 592. Syme, E. B. xi. 20. 1698. Nym. 791. Bx. 56.

Alien. Waste ground. Rare. A. June–Aug.

3. Swere. Near the Foundry, *A. Fr.* Neithrop, *Gull.* Near Newland Drawbridge, *T. Bees.*

4. Ray. Between Oxford and Summertown, *Bx.* The Parks, *Bx. in Purton.*

5. Isis. Behind the Observatory, *Sib.* Blenheim, *Rogers.* Near the Great Western Railway Station, Oxford.

6. Thame. St. Clement's, *Bx.* Bullingdon.

Berks. Wootton, near Bagley.

PHLEUM. L.

P. pratense, L. *Common Catstail Grass. Timothy Grass.*

Top. Bot. 473. Syme, E. B. xi. 32. 1706. Nym. 793. Bx. 68.

Native. Pascual. Pastures, meadows, roadsides. Common in all the districts. P. June–Oct.

First record, *Sir Joseph Banks*, 'Near Oxford,' about 1760.

It occurs in the Parks, Christ Church Meadows, etc.

Var. *P. stoloniferum*. Caversham, A. Fr.

Var. *P. nodosum*, L. Species in Sibthorp. Syme, E. B. xi. 32. 1707.

1. Stour. Sibford, Tadmarton.

3. Swere. Bretch, Epwell.

4. Ray. Mesopotamia, typical.

5. Isis. Ditchley, Bampton.

6. Thame. Bullingdon Green, Wheatley.

7. Thames. Stokenchurch Hill! *Hb. Bx.* Between Pangbourne and Goring, *Newb.* Woodcote, South Stoke.

Another form with much longer spikes and stouter habit also occurs.

[*P. asperum*, Jacq.

Comp. Cyb. 592. Syme, E. B. xi. 199. Nym. 793.

Alien. Extinct.

First and only record, *Sib.* 1794. '*Phalaris paniculata*, Ait. Walls, dry pastures. On the wall of Rose Lane. Fl. June.'

It will be well here to explain that Rose Lane Wall is close to the Botanic Garden, where the plant is cultivated, and whence the specimen without doubt originated. This record in *Walker's Flora* increased to, 'In dry open fields . . . wall of Rose Lane, *Sb.*' In *Arnott's Flora* it is described as being rare in dry open fields in the western and midland parts of England. In other works it expanded from 'dry walls, Rose Lane, Oxford,' to 'dry walls, Oxford,' 'dry walls, Oxfordshire,' 'dry stony places, Oxfordshire,' 'stoney fields, Oxfordshire.'

On the faith of this one record, and another from Gloucestershire almost equally ambiguous, this plant for some time appeared in the British Floras.]

ALOPECURUS. L.

A. pratensis, L. *Meadow Foxtail Grass.*

Top. Bot. 474. Syme, E. B. xi. 27. 1703. Nym. 793. Bx. 45.

Native. Pratal. Meadows, pastures, roadsides. Common in all the districts. A. April-June.

First record, *Sib.* 1794.

A. agrestis, L. *Field Foxtail Grass.*

Top. Bot. 475. Syme, E. B. xi. 22. 1699. Nym. 794.

Native. Agrestal. Cultivated fields. Common in all the districts.

P. April-Oct.

First record, *Sib.* 1794.

A. geniculatus, L. *Jointed Foxtail Grass.*

Top. Bot. 474. Syme, E. B. xi. 25. 1701. Nym. 794.

Native. Paludal. Wet places, pool and ditch margins. Generally distributed. P. May-July.

First record, *Sib.* 1794.

A very glaucous form occurred at Marston and on Otmoor.

Var. *A. pronus*, Mitt.

4. *Ray*. Otmoor.

The longer awn of *geniculatus* and the duller coloured anthers seem constant features.

***A. fulvus*, Sm.**

Syme, E. B. xi. 23. 1700. Nym. 794.

Native. Paludal. Pondsides. Very Local. June, July.

First found by the Author in 1885.

3. *Swere*. Abundant by the sides of Clattercut Reservoir.

Berks. By Embrook Mill, near Wokingham, *Brit.* Northants, Daventry Reservoir. Warwick.

CYNOSUREUS. L.

***C. cristatus*, L.** *Crested Dog's Tail Grass.*

Top. Bot. 494. Syme, E. B. xi. 133. 1776. Nym. 797. Bx. 216.

Native. Pascual. Dry fields, roadsides, etc. Common and generally distributed. P. July, Aug.

First record, *Sib.* 1794. Forms a considerable portion of the herbage of some of the drier pastures, and roadsides. Its spikes are frequently twisted into bouquets by the village children.

PHRAGMITES. Trin.

***P. communis*, Trin.** *Common Reed.*

Top. Bot. 478. Syme, E. B. xi. 58. 1727. Nym. 798. Bx. 372.

Native. Paludal. River-, pond- and ditch-sides. Rather common. P. Aug.

First record, *Arundo vallisoria foliis ex luteo variegatis*. Found by the river Thames not far from Oxford, *Ray, Stirp.* 1690.

Phragmites is on record for all the districts except the Stour, in which doubtless it occurs. It is extremely abundant by the Thames side and the Cherwell. Thame and Ouse have it also frequently on their margins. It occurs in great profusion in the marsh under Headington Wick Copse, where it forms from November to January a beautiful show. The wind has driven the feathery seeds from here across the fields towards Elsfield, the hedges retaining a considerable number, so that now a thicket of them runs along an elevated hedgerow on a dry sandy soil, very different from its usual habitat. By the river above Bablock Hithe it attains a height of ten feet. Near Headington Wick, *Phragmites nigricans*, G. and G. (a starved form ?) has been noticed.

CALAMAGROSTIS. Ad.

***C. Epigejos*, Roth.** *Wood Small Reed.*

Top. Bot. 479. Syme, E. B. xi. 53. 1723. Nym. 798. Bx. 412.

Native. Sylvestral. Woods and thickets. Rather rare. P. June.
First record, *Dr. Lightfoot*, 1770.

4. Ray. Marston, Headington Wick, *H. Bos.*

5. Isis. Charlbury, *T. Westcombe*. Tar Wood, *Sib.*

6. Thame. Magdalen College Copse, *Sib.*! Copse near Horsepath,
Walk. Furze-field near Bullingdon Green, *Bx.*

7. Thames. Grays near Henley, *Dr. Lightfoot.*

Berks. Bagley Wood, Botley, Appleton, Pangbourne, *Brit.* North-
ants, Gloster, Warwick.

[*C. lanceolata*, *Roth.* Northants, Gloster W., Warwick.]

[*Gastridium lendigerum*, *Gaud.* Gloster W., Warwick.]

[*Apera Spica venti*, *B.* Berks, Old Windsor.]

AGROSTIS. L.

A. alba, L. *Fiorin.* Marsh Bent.

Top. Bot. 478. Syme, E. B. xi. 48. 1719. Nym. 800. Bx. 492.

Native. Pratal, etc. Field borders, moist meadows, etc. Common
and generally distributed. P. June, July.

First record, *Sib.* 1794.

The roots are frequently rooting when it is the *A. stolonifera*, L. spec.
Sib., which probably included *A. nigra*, With.

A. vulgaris, With. *Common Bent Grass.*

Top. Bot. 478. Syme, E. B. xi. 50. 1721. Nym. 801.

Native. Pascual. Dry pastures, roadsides, heaths, etc. Common and
generally distributed. P. June, July.

First record, *Sib.* 1794. *A. tenuis*, *Sib.*

Var. *pumila*, Light.

1. Stour. Tadmarton Heath.

5. Isis. North Leigh Heath, Fifield.

6. Thame. Shotover, *Hb. Bx.*, 1824.

7. Thames. Binfield Heath.

Berks. Bagley Wood, *Bx.*

A. nigra, With.

Journ. Bot. 1882, t. 227, p. 65.

Native. Agrestal. Cornfields on stiff soil. Local, but probably occurs
in all the districts. P. July-Sept.

First record, *the Author*, 1883.

5. Isis. Near Bladon.

6. Thame. Dorchester, Cuddesdon.

7. Thames. Lewknor.

Berks. Wittenham. Bucks, Northants, *Rep. of Rec. Club*, 1883.
Warwick.

A. canina, L.

Top. Bot. 478. Syme, E. B. xi. 46. 1718. Nym. 801.

Native. Pascual and ericetal. Heaths, meadows, woods. Rather rare.

P. July, Aug.

First record, *Sib.* 1794.

1. Stour. Tadmorton Heath.

3. Swere. Epwell Heath.

4. Ray. Headington Wick.

5. Isis. Bruern and Fifield, Ramsden Heath.

Berks. Wootton Heath, etc. Bucks, Napford. Northants, Harlestone. Gloster, Warwick.

Var. *mutica*, M. et K. *A. varians*, Th. *A. vinealis*, Desv. *A. mutabilis*, Sib.

Native. Ericetal. Heaths. Rare. P. July.

5. Isis. North Leigh Heath, Ramsden Heath.

Prof. Hackel has kindly named this for me. It is almost certainly the *mutabilis* of Sib. recorded by him as a species from South Leigh and Stanton St. John, which is the plant erroneously referred to *A. setacea*, Curtis in *Walker's Flora*. *A. setacea* does not occur in Oxford, the glaucous leaves of *mutica* bear a slight resemblance to *setacea*, but in addition to other points of difference their flaccidity would distinguish it. In the *Cybele* Mr. Watson says of *A. setacea*, 'supposed to have been erroneously reported for Oxon, the authority being *Walker's Flora*, p. 169.' *Phyt.* ii. 113 n. s., Oxford, *A. setacea*, extinct. It was never found.

[*A. setacea*, *Curt.*

Berks. Bagshot Heath, *B. G.*]

MILIMUM. L.

M. effusum, L. Wood Millet Grass.

Top. Bot. 477. Syme, E. B. xi. 60. 1728. Nym. 806. Bx. 247.

Native. Sylvestral. Woods and shady places. Local. P. May-July.

First record, *Sib.* 1794.

2. Ouse. Audley [Ardley], *Sib.*

5. Isis. Wilcot, Tar Wood, *Sib.* Coggs Wood, *H. Bos.*

7. Thames. Mongewell, *Sib.* Caversham, *Hb. Lawson.* Stokenchurch, *Hb. Bx.* Goring, *H. Bos.* College Wood, Maple Durham, Sunley Wood, Vernals Wood, Ibstone, Ipsden, etc. Common in the Chiltern Woods.

Berks. Near Childswell Farm, *Bx.* Streatley, etc.

AIRA. L.

A. caespitosa, L. Turfy Hair Grass.

Deschampsia caespitosa, B.

Top. Bot. 480. Syme, E. B. xi. 63. 1730. Nym. 807.

Native. Ericetal, etc. Pastures, ditch-sides, commons, heaths, woods. Generally distributed and locally common. P. June-Aug.

First record, *Sib.* 1794.

At Horton it occurred ergotized. It is found in Christ Church Meadow and the Parks. In damp shady woods a very slender form is found.

A. flexuosa, L. *Heath Hair Grass.*

Top. Bot. 480. Syme, E. B. xi. 67. 1732. Nym. 808.

Native. Ericetal. Heaths. Rare. P. June, July.

First record, *Gramen nemorosum paniculis albis, capillaceo folio*, C. B. Pin. In ericeto solo glareoso haud longe ab Oxonio inventum a J. Bobart. (Dill. Ray, 1724). *Morison*, 200. 1699.

1. Stour. Tadmorton Heath, *A. Fr.*

5. Isis. North Leigh Heath, *Sib.*!

6. Thame. Shotover, *Bz.* 1885.

7. Thames. Withy Coppice, Binfield Heath.

Berks. Childswell Farm, *Bz.* Bagley, Boar's Hill, Wootton.

HOLCUS. L.

H. mollis, L. *Creeping Soft Grass.*

Top. Bot. 483. Syme, E. B. xi. 83. 1743. Nym. 809.

Native. Sylvestral. Woods, Heaths. Rather rare. P. July.

First record, *Sib.* 1794.

1. Stour. Tadmorton Heath!

3. Swere. The Causeway, *Gull.*, rare. Epwell Heath, Hanwell Heath, *Bees.* Bloxham Grove, *A. Fr.*

4. Ray. Stow Wood, *Sib.* Summertown, *R. Linton.* Marston Lane, *Bz.* Marston.

6. Thame. Near Thame, *Hb. Bz.*

7. Thames. Chinnor, Checkendon.

H. lanatus, L. *Meadow Soft Grass.*

Top. Bot. 483. Syme, E. B. xi. 85. 1744. Nym. 809. *Bz.* 64.

Native. Pratal, etc. Meadows, cultivated fields, waste places. Abundant and generally distributed. P. May-July.

First record, *Sib.* 1794.

ARRHENATHERUM. P. B.

A. avenaceum, P. B. *Oat Soft Grass.*

Top. Bot. 483. Syme, E. B. xi. 81. 1742. Nym. 809. *Bz.* 480.

Native. Septal, etc. Roadsides, hedges, pastures, thickets, etc. Abundant throughout the county. P. May-July.

First record, *Sib.* 1794, *Holcus avenaceus*, W.

Also known as *A. elatius*, Fr. *Avena elatior*, L.

Var. *A. bulbosum*, Sch. *Onion Couch Grass*.

3. Swere. Milton, Adderbury, col. *A. French*, *Hb. Br. Mus.*

4. Ray. Near Upper Heyford, *Rev. E. Fox*! very typical.

AVENA. L.

A. fatua, L. *Wild Oat*.

Top. Bot. 480. Syme, E. B. xi. 79. 1741. Nym. 811.

Colonist. Agrestal. Cultivated fields. A. July, Aug.

First record, *Sib*. 1794.

1. Stour. Between Sibford and Tadmarton Heath, three-flowered, flower glume glabrous, pedicels hairy, *A. Fr.*

2. Ouse. Mixbury.

3. Swere. Adderbury East, *A. Fr.* Bloxham.

4. Ray. Upper Heyford, abundant, *Bx. in Walker*. In the *New Bot. Guide* this record is erroneously given for Northamptonshire, in which county there is a village of the same name. Islip, *H. Bos.* Oddington, *Bx.* Beckley, etc.

5. Isis. Handborough, Charlbury.

6. Thame. Rose Hill, *Bx.* Dorchester, Horsepath.

7. Thames. Goring.

Var. *intermedia*, Lindgren. Bullingdon.

Var. *pilosa*, Syme. Marston, etc.

Var. *pilosissima*, Gray. Bicester, etc.

* *A. strigosa*, Schreb. *Black Oat*.

Comp. Cyb. 593. Syme, E. B. xi. 77. 1740. Nym. 810.

Alien. Agrestal. Cornfields. Rare or probably overlooked. A. July.

First record, *A. French*, 1876.

1. Stour. Between Sibford and Tadmarton Heath, *A. Fr.*

2. Ouse. Mixbury.

3. Swere. Heyford.

4. Ray. Marston.

5. Isis. Yarnton.

6. Thame. Horsepath.

7. Thames. Dunsden, South Stoke.

* *A. sativa*, L. *Oat*.

Alien. Occurs on waste ground, field-borders, as a casual plant.

A. pubescens, Huds. *Downy Oat Grass*.

Top. Bot. 481. Syme, E. B. xi. 74. 1737. Nym. 811. Bx. 292.

Native. Pascual, glareal. Dry calcareous or gravelly pastures, chalk downs. Not uncommon. P. June.

First record, *Gr. aven. panic. purpureo argentea splendente*. Blackstone, 1737.

1. Stour. Stourwell.
3. Swere. Bretch, *T. Bees*. Shutford.
4. Ray. Kirtlington, south-west of village in dry pastures, *W. Wilson Saunders*! The Parks, *H. E. Garnsey*! plentiful 1885. Marston, Stow Wood.
5. Isis. Cornbury Quarry! *Blackstone*. Wolvercote! *Rev. R. Linton*. Witney! Burford! *H. Bos*. Wychwood, Ditchley Park, near Blenheim, Lyneham Camp.
6. Thame. Cowley! Littlemore! Bullingdon! *Sib*. Shotover, *Hb. Lawson*. Headington Quarries, Bullingdon Green, Holton Quarries.
7. Thames. 'Frequent in open chalky fields of Oxon,' *Sm. Eng. Fl.* Caversham! *H. Trimen*, *Hb. Br. Mus.* Mongewell.

Berks. Cumnor.

A. pratensis, L. *Meadow Oat Grass.*

Top. Bot. 482. Syme, E. B. xi. 75. 1738. Nym. 811.

Native. Pascual. Dry calcareous and chalky fields. Rather rare. P. July.

First record, *Sib*. 1794.

3. Swere. Bretch, *T. Bees*. Neithrop, *A. Fr.* Shutford.
4. Ray. Meadows between Headington Wick and Elsfield.
5. Isis. Between Witney and Burford, *H. Bos*! Cornbury Park, Tainton Quarries.
6. Thame. Cowley, Littlemore, Bullingdon, *Sib*. Iffley, *Newb.* Holton Quarries.
7. Thames. Caversham, *Newb.*! Whitchurch, Crowsley.

The Cocoons of the Burnet Moth are found attached to the culms of this and of *Bromus erectus*.

A. flavescens, L. *Yellow Oat Grass.*

Trisetum flavescens, P. B.

Top. Bot. 482. Syme, E. B. xi. 73. 1736. Nym. 812.

Native. Pascual. Meadows, pastures, roadsides. Locally common. P. June, July.

First record, *Sib*. 1794.

1. Stour. Tadmarton.
2. Ouse. Mixbury.
3. Swere. Banbury, Adderbury, etc., *A. Fr.* Somerton.
4. Ray. Headington Wick, *H. Bos*! The Parks, *H. E. Garnsey*! Stow Wood, Mesopotamia.
5. Isis. Woodstock! *H. Bos*. Wolvercote, Ditchley, North Leigh, Burford.
6. Thame. Bullingdon, Sandford, *Hb. Lawson*. Shotover, Wheatley, etc.
7. Thames. South Stoke, Goring, Caversham, etc.

The Mesopotamia plant was a lax form with much greener florets.

A. caryophyllea, Web. *Silvery Hair Grass.*

Top. Bot. 480. Syme, E. B. xi. 69. 1734. Nym. 815. Bx. 416.
Native. Glareal. Dry heathy places. Rather rare. A. May, June.
First record, Sib. 1794. *Aira caryophyllea*, L.

1. Stour. Tadmarton Heath, with var. *patulipes*, Jord.
 3. Sewre. Between North Newington and Wroxton, T. Bees. Near Wroxton Mill, Gull.
 4. Ray. Above Headington Wick Copse, Walker! Side of Stow Wood.
 5. Isis. South Leigh Heath, Sib.
 6. Thame. Shotover, Sib. Do. on north side, 1884.
 7. Thames. Ibstone, Binfield.
- Berks. Foxcombe Hill, Frilford, Tubney.

Var. *aggregata*, Tim.

6. Thames. Shotover.

A. præcox, P. B. *Early Hair Grass.*

Aira præcox, L.

Top. Bot. 480. Syme, E. B. xi. 71. 1735. Nym. 814.
Native. Glareal. Dry heathy places. Local. A. April, May.
First record, Gram. *parv. præcox spica laxa canescente*, R., Blackstone, 1737.

1. Stour. Tadmarton Heath! Bees.
 3. Swere. Epwell Heath.
 4. Ray. Stow Wood, Beckley.
 5. Isis. Plentiful in Wychwood Forest, Blackstone! South Leigh, Sib. Finstock Heath, North Leigh Heath.
 6. Thame. Shotover! Sib. Near the Ochre Pits, Shotover, H. E. Garnsey.
 7. Thames. Binfield Heath, Nettlebed, Ibstone Common.
- Berks. Boar's Hill, Tubney, Frilford. Northants, Gloster, Warwick.
In Oxford *præcox* is commoner than *caryophyllea*.

KÖHLERIA. P.

K. cristata, P. *Crested Hair Grass.*

Top. Bot. 483. Syme, E. B. xi. 88. 1746. Nym. 817.
Native. Glareal. Calcareous and sandy pastures, roadsides. Local.
P. June, July.

First record, Sib. 1794. *Poa cristata*, L.

3. Swere. Bretch, Bees. Hanwell, Bloxham, A. Fr.
4. Ray. Between Middleton Stoney and Bicester, A. Fr. Summertown, H. Bos. Headington Wick, R. Linton. Stow Wood, roadside near Elsfield.
5. Isis. Woodstock, Wootton.

6. Thame. Shotover, Bullingdon, *H. Bos.*
 7. Thames. Caversham, *Newb.* Chinnor, Lewknor, and a specimen with white glumes also on Chinnor Hill.
 Var. *gracilis*, *Bor.*
 4. Ray. Stow Wood, 1884.
 Berks. Streatley, Frilford, Wootton. Bucks, Northants, Gloster, Warwick.

MELICA. L.

- M. uniflora**, *Retz.* *Melic Grass.*
 Top. Bot. 485. Syme, E. B. xi. 93. 1749. Nym. 818.
 Native. Septal. Hedges, shady woods. Locally common. P. May, June.
 First record, *Gram. avenac. nemor. glumis ravior. ex fusco xerampelinis*,
 R. Blackstone, 1737.
 2. Ouse. Ardley, *Sib.*
 3. Swere. Absent (?).
 4. Ray. Near Rousham, *A. Fr.* Middleton Stoney, *Rogers.* Headington Wick, *H. Bos.* Near Stow Wood.
 5. Isis. Plentifully in Wychwood, *Blackstone* / Church Handborough !
Bz. Lees Rest Wood, *T. Westcombe.* Mill Wood.
 6. Thame. Shotover under hedge right-hand side of road, *Bz.* Horsepath Lane.
 7. Thames. Mongewell ! Stokenchurch, *Sib.* Goring, *H. Bos.* Near Shiplake, *A. Fr.* Henley, *Bz.* / Common on the chalk, especially on the tertiary. Withy Coppice, Nettlebed, Checkendon, Sunley Wood, Woodcote, Ibstone, Assenton, Binfield, Whitchurch, etc.
 Berks. Tubney, Pangbourne, etc.
 * *M. ciliata*, *L.* Nym. 817.
 Alien. 'I suspect this will be naturalized about Oxford; it is now abundant on an old wall on the north side of the garden,' *Hb. Bz.* 1817.
 [*M. nutans*, *L.* Bedford Purlieus, Northants, 1874. Gloster E. ?].

SIEGLINGIA. Bernh.

- S. decumbens**, *B.*
Danthonia, D.C. *Triodia decumbens*, B.
 Top. Bot. 483. Syme, E. B. xi. 87. 1745. Nym. 817. Bx. 488.
 Native. Ericetal. Heaths, bogs, dry pastures. Local and rare. P. June, July.
 First record, *Sib.* 1794. *Festuca decumbens*, L.
 4. Ray. Between Islip and Oddington, *Mrs. Davenport.* Beckley.
 5. Isis. South Leigh, *Sib.* North Leigh.
 6. Thame. Shotover, *Sib.* / Bullingdon, *H. Bos.*
 7. Thames. Binfield Heath.
 Berks. Bagley, Streatley, Bablock Hithe.

MOLINIA. *Sch.*

M. caerulea, *Mch.* *Purple Melic Grass.*

Top. Bot. 486. Syme, E. B. xi. 94. 1750. Nym. 818. Bx. 252.

Native. Uliginal. Bogs and marshes. Rare. P. July, Aug.

First record, *Sib.* 1794. *Melica caerulea*, *Sib.*

4. Ray. Headington Wick, *H. Bos.* 1885. Stow Wood.

5. Isis. South Leigh Heath, *Sib.* North Leigh Heath, 1885.

6. Thame. Morass on Bullingdon Green, *Sib.* 1885. Shotover, *H. Bos.*

7. Thames. Binfield Heath.

Berks. Frilford.

Given unlocalised in Walker.

DACTYLIS. *L.*

D. glomerata, *L.* *Cock'sfoot Grass.*

Top. Bot. 494. Syme, E. B. xi. 136. 1778. Nym. 819. Bx. 108.

Native. Pascual, etc. Pastures, roadsides, waste places. Abundant in all the districts. P. June, July.

First record, *Sib.* 1794.

A form with yellow anthers also is not unusual.

VULPIA. *Gm.*

V. sciuroides, *Gm.* *Barren Fescue Grass.*

Festuca sciuroides, Roth.

Syme, E. B. xi. 142. 1782. Nym. 820.

Native. Glareal. Sandy pastures, walls, dry banks, etc. Local. A. May, June.

First record, *Sib.* 1794. *F. bromoides*, L.

1. Stour. Tadmarton Heath, *T. Bees.*

3. Swere. Shutford.

4. Ray. Headington, *Sib.* Kidlington, *H. Bos.* Elsfield, Headington Wick.

5. Isis. Eynsham, *H. Bos.* Finstock Heath, North Leigh, fine specimen.

6. Thame. By Warnesford Asylum, *H. Bos.* Waterstock, *A. Fr.* Shotover.

7. Thames. Binfield Heath, Brightwell, Ibstone.

Berks. Bagley Wood, Ferry Hinksey, Boar's Hill, Cumnor, Wootton; Tubney.

V. Myuros, *Gm.* *Capon's-tail Grass.*

F. pseudo myurus, Soy.

Top. Bot. 495. Syme, E. B. xi. 141. 1781. Nym. 820.

Native. Glareal. Wall tops, dry sandy ground. Rather rare. A. June, July.

First record, *Sib.* 1794. *F. myurus*, L.

1. Stour. Tadmarton Heath, *T. Bees.*

3. **Swere.** Adderbury, Upper Tadmarton, Barford, *A. Fr.* Broughton, Cropredy.
 4. **Ray.** Kirtlington, *W. Wilson Saunders*, '15 to 18 inches high,' Rousham, Middleton Stoncy, *Bz.* Marston, *Sib.* / abundant on all the walls.
 5. **Isis.** Eynsham, *Bz.* Bampton.
 6. **Thame.** Iffley, *Sib.* Bate's Ley's Thame, *Bz.* Shotover, *H. Bos.* Cowley, *Newb.* Great Haseley, Stanton St. John, Bullingdon.
 7. **Thames.** Goring.
- Berks.** Marcham, *Rep. of Rec. Club*, 1883. Wootton. Bucks, Northants, Gloster E., Warwick.

BROMUS. L.

B. sterilis, L. *Barren Brome Grass.*

Top. Bot. 498. Syme, E. B. xi. 163. 1799. Nym. 821.

Native. Vistical. Waysides, wall-tops, banks, waste places. Very common, occurring in all the districts. A. June.

First record, *Sib.* 1794.

Occurs on wall-tops in Oxford, as in Rose Lane, etc. In such situations the spikelets become condensed; could such a state have been mistaken for *madritensis* by the early botanists?

B. asper, Murr. *Fairy-stalked Brome Grass.*

Top. Bot. 498. Syme, E. B. xi. 157. 1795. Nym. 822.

Native. Septal, etc. Hedges, woods, copses. Occurs in all the districts, but not as a very abundant grass. P. June, July.

First record, *Sib.* 1794. *B. hirsutus*, Curt.

Gulliver in his list included a *B. asper* as well as a *B. hirsutus*. *B. Benekenii* has not been noticed in the county, the Oxon plant being *B. serotinus*, Ben.

B. erectus, Huds. *Upright Brome Grass.*

Top. Bot. 499. Syme, E. B. xi. 159. 1796. Nym. 822.

Native. Glareal, pascual. Dry limestone and chalky pastures, field-borders, rail-banks, etc. Locally abundant. P. June, July.

First record, *Sherard*, 1690, and first as a British plant. *Festuca avenacea sterilis spicis erectis*, R.

1. **Stour.** Near the Stourwell.

2. **Ouse.** Mixbury.

3. **Swere.** Somewhere near Banbury, Canalside, *Bees.* Somerton.

4. **Ray.** Headington Wick, *Bz.* Beckley! *A. Fr.* Stow Wood! *H. Bos.* Marston, abundant by railside between Kirtlington and Upper Heyford, the Parks Oxford.

5. **Isis.** Hedges beyond Botley, *Bobart*; this probably is in Berks. About Cornbury Quarries and several other parts of Wychwood Forest, *Blackstone*, 1746. Ditchley Park, *Mr. Woodward.* Wood-

stock, *H. Bos.* Charlbury, Blenheim, Wolvercote; abundant about Wootton, and Ditchley, Lyneham Camp, Ashford Mills. By the riverside near Tumbling Bay and at Osney, seeds probably brought down by the river to this situation. Common about Bampton, Brize Norton, Tainton Quarries.

6. **Thame.** On the side of Bullingdon Green, near Magdalen Copse, *Sib.*! Holton Quarries, Bayswater, etc.

7. **Thames.** Goring, Caversham, South Stoke.

Berks. Foxcombe Hill, Cumnor, Streatley. Bucks, Northants, Gloster E., Warwick.

In *Trans. Linn. Soc.*, vol. iv. 1798, *Sir James Smith* quotes Bobart's locality and also the Ditchley habitat recorded by Mr. Woodward, and states it was first found in Oxford by Sherard, and given by him to Bobart. In *Ray's Syn.*, ed. iii., Dillenius has added synonyms of *Plukenet* and *Morison*, which belong to a widely different plant, *B. madritensis*.

'Not rare in Oxford, where Sherard first found this species,' *Sm. Eng. Fl.*

Var. *B. villosus*, Syme, I have failed to find; it occurs in Warwick.

* *B. secalinus*, L. *Rye Brome Grass.* *Serrafalcus*, Bab.

Comp. Cyb. 402. Syme, E. B. xi. 165. 1800. Nym. 822.

Colonist. Agrestal. Cornfields and pastures. Rare. A. June, July. First record, *Sib.* 1794.

3. **Swere.** First ploughed field Hanwell foot-road, *T. Bees.* Between Milton and Bloxham, *A. Fr.* Somerton.

4. **Ray.** Elsfield, Marston Fields.

5. **Isis.** Yarnton, *H. Bos.*

6. **Thame.** Headington, *H. Bos.* Dorchester.

7. **Thames.** Mongewell, Chinnor, Crowsley.

B. commutatus, Schrad. *Serrafalcus*, Bab.

Top. Bot. Ayres Sp. Syme, E. B. xi. 168. 1802. Nym. 822.

Native. Pratal, etc. Cultivated fields, meadows, and field-borders, etc. B. June, July.

First record, *W. W. Newbould*, about 1860.

1. **Stour.** Stourwell, *T. Bees.*

2. **Ouse.** Mixbury.

3. **Swere.** Somerton.

4. **Ray.** Marston, Elsfield.

5. **Isis.** North Leigh, Kelmscott, Tadpole tow-path side.

6. **Thame.** Var. *multiflorum*, Parn. Bullingdon, *H. Bos.* Christ Church Meadow.

7. **Thames.** Several places between Goring and Pangbourne, *Newb.* South Stoke. Var. *multiflorum*, Parn.

Berks. Bucks, Gloster E., Northants, Warwick.

B. racemosus, L. *Serrafalcus*, Bab.

Syme, E. B. xi. 167. 1803. Nym. 823.

Native. Pascual. Pastures, meadows. Scattered through the county. B. June, July.

First record, *W. Baxter in Purton*, 1821.

3. Swere. Shutford.

4. Ray. Marston, Otmoor.

5. Isis. Christ Church and Merton Meadow, *Bx. in Purton*. Oxford, *Newb.* Kelmscott, Bampton, common in the meadows of the Upper Thames.

6. Thame. Cowley Field, Cheney Lane, Meadows between St. Clement's and Iffley, *Bx. in Walk.* Thame, *Hb. Bx.* Shotover, Bullingdon.

7. Thames. Goring, *B. King.* Sonning, *F. Tufnail.* Chinnor, Binfield, Caversham.

Berks. Bucks, Gloster E., Northants.

* **B. arvensis, L.** *Field Brome Grass.* *Serrafalcus*, Bab.

Comp. Cyb. 596. Syme, E. B. xi. 171. 1806. Nym. 823.

Alien. Cornfields, roadsides. Very rare. A. July, Aug.

First certain record, *H. Boswell*, 1860.

4. Ray. The Parks Oxford, *H. Bos., Rep. of Bot. Ex. Club*, 1866. Headington Wick, Stow Wood, *H. Bos.* 1860.

5. Isis. [Ditchley, *Mr. Woodward in Bot. Guide* and *New. Bot. Guide*. This record Mr. Newbould would refer to *commutatus*, but I suspect *erectus* was intended, there being no trace of any other record by Mr. Woodward than the one quoted under, *B. erectus*.]

B. mollis, L. *Soft Brome Grass.* *Serrafalcus*, Bab.

Top. Bot. 501. Syme, E. B. xi. 169. 1804. Nym. 823.

Native. Pascual, etc. Waysides, meadows, banks, etc. Very abundant throughout the county. A. or B. May, June.

Common in Oxford, as in the Parks, Christ Church Meadow, etc.

First record, *Sib.* 1794.

Var. *B. glabrescens*, Coss. (*racemosus*, Parn. non Parl.).

4. Ray. Elsfield.

5. Isis. North Leigh, Charlbury.

6. Thame. Oxford, *Newb.*

7. Thames. Goring, Whitchurch, Binfield, Caversham, etc.

[**B. madritensis, L.**

Top. Bot. 23 (?). Syme, E. B. xi. 160. 1797. Nym. 821.

Incog. or extinct. 'Walls.' A. May.

First and only record, *Sib.* 1794.

'Iffley, *B. muralis*, Huds.,' *Sib.*

Old walls about Oxford, *Huds. Fl. Ang.* 1798. Formerly grew near London and probably Oxford, *Cyb. Br.* iii. 227. Hudson's record was probably an incorrect copy of Sibthorp's.

Gloster W., St. Vincent's Rocks.]

FESTUCA. *Vill.*

F. gigantea, Vill. *Tall Brome Grass.*

Top. Bot. 498. Syme, E. B. xi. 155. 1793. Nym. 825.

Native. Sylvestral. Woods, shady hedgesides, etc. Common and generally distributed. P. July.

First record, *Sib.* 1794. *Bromus giganteus*, L.

Occurs in Christ Church Meadow, Magdalen College Walk, etc.

Var. *triflora*, Sm. Syme, E. B. xi. 155. 1794.

Marston Lane, etc.

F. elatior, L. *Tall Fescue Grass.*

Top. Bot. 497. Syme, E. B. xi. 150. 1789. Nym. 824.

Native. Pratal. Wet pastures, riversides, etc. Generally distributed, especially in the Thame, Thames, and Cherwell districts. P. June, July.

First record, *Sib.* 1794.

Var. *arundinacea*, Schreb. Syme, E. B. 1790.

5. *Isis.* Port Meadow, *Mrs. Davenport!*

F. pratensis, Huds. *Meadow Fescue.*

Top. Bot. 497. Syme, E. B. xi. 153. 1791. Nym. 825. Bx. 324.

Native. Pratal, etc. Moist meadows, pastures, cultivated ground. Abundant in many districts. P. June, July.

First record, *Sib.* 1794.

Var. *lohiacea*, Curt. Prof. Hackel and Nyman give this as a hybrid of *F. pratensis* with *Lolium perenne*.

Sibthorp gives this as a species, and quotes Hudson's description and Curtis. The true *lohiacea* has distichous spikelets on a flat not triangular rachis.

3. *Swere.* Meadow, *Bees.*

4. *Ray.* Summertown, *H. Bos.* Islip.

5. *Isis.* Yarnton, *H. E. Garney.* Binsey, *H. Bos.*

6. *Thame.* Cowley, *H. Bos.* Iffley.

7. *Thames.* North Stoke.

A dwarf form of *pratensis*, with dark glossy glumes, occurred on the north side of Shotover in a ploughed field.

F. duriuscula, L. *F. ovina v. duriuscula*, Hack.

Top. Bot. 495. Syme, E. B. xi. 145. 1785. Nym. 827.

Native. Pascual. Meadows, pastures, roadsides. Common. P. June.
First record, *Sib.* 1794.

Occurs on walls in Oxford. A large form three feet high in Headington Wick Copse, is fide Hackel *F. rubra*, L.

Var. *F. trachyphylla*, Hack. Mon. Fest. p. 91.

This well-marked plant occurs on wall-tops and dry banks in districts on the great oolite, as at Bretch, in Swere district, Brize Norton, Burford, etc., in Isis. Its rigid narrow leaves, with scabrid lamina, and scaberulous culms, well distinguish it. *Gramen incog. spica sparti foliis reflexis glaucis striatis radice fungosa* of Dillenius from Brean Down is probably the same thing, as is the *Gramen foliolis junceis oblongis radice alba* of the synopsis from Wootton Heath, Berks. It occurs also in Gloster and Wilts.

F. ovina, L. *Sheep's Fescue Grass.*

Top. Bot. 495. Syme, E. B. xi. 143. 1783. Nym. 828.

Native. Glareal, etc. Dry pastures, heaths, chalk downs, etc. Locally common. P. June. Recorded from all the districts, but not a very frequent plant.

First record, *Sib.* 1794.

Var. *tenuifolia*, *Sib.*

1. Stour. Tadmarton Heath.

3. Swere. Epwell Heath.

6. Thame. Bullingdon Green, *Sib.*

Var. *major*, Syme.

7. Thames. Caversham.

Var. *glauca*, Lam. Spec. Nym.

4. Ray. Stow Wood.

GLYCERIA. Br.

G. aquatica, W. *Reed Meadow Grass.*

Top. Bot. 486. Syme, E. B. xi. 100. 1751. Nym. 830.

Native. Paludal. River-, canal-, and brooksides. P. July.

Recorded for all districts except the Stour.

First record, *Sib.* 1794. *Poa aquatica*, L.

G. fluitans, Br. *Floating Meadow Grass.*

Festuca fluitans.

Top. Bot. 487. Syme, E. B. xi. 79. 1752. Nym. 830.

Native. Paludal, etc. Ponds, ditch, etc., often floating. Common and generally distributed. P. June-Oct.

First record, *Sir Joseph Banks* about 1760.

Ergotized plants were common between the Canal and Port Meadow in the wet year of 1879.

On dry ground a form occurs with narrower and shorter leaves, and very patent panicle branches.

G. plicata, Fries.

Comp. Cyb. 393. Syme, E. B. xi. 98. 1753. Nym. 830.

Native. Paludal. Ditchsides, ponds, slow streams, often growing in the water. P. June-Oct.

First record, *Rev. W. Newbould* and *H. Boswell* about 1860.

4. Ray. Marston, Otmoor.

5. Isis. Bampton, Clanfield, Osney.

6. Thame. Iffley, *Newb.*, seems as common as *fruitans*, *H. Bos.* Cowley Marsh, Shotover.

7. Thames. Ibstone, Caversham.

Berks. South Hinksey. Bucks, Northants, Gloster E., Warwick.

Var. *pedicellata*, Towns.

4. Ray. Marston.

5. Isis. Kingham, Foscott.

6. Thame. Cowley Marsh, see *Rep. of Rec. Club*, 1880. Wheatley.

7. Thames. Saunders' Green.

Berks. Radley, Kennington, Abingdon.

SCHLEROCHELOA. P. B.

S. rigida, P. *Poa*, L. *Festuca*, Kth.

Top. Bot. 490. Syme, E. B. xi. 108. 1758. Nym. 832. Bx. 288.

Native. Glareal. Dry calcareous ground, walls, etc. Not very common.

A. May, June.

First record, *Dillenius*, about 1730.

3. Swere. Newland, Adderbury, *Gull.* Bretch, North Newington, *A. Fr.* Barford St. John, Milton.

4. Ray. Bicester, Kirtlington, Holywell, Elsfield.

5. Isis. Wolvercote, Blenheim Park Wall, Cornbury, Bampton, Kelmscott, Tainton.

6. Thame. Shotover! *Dillenius*. Great Milton, Haseley, Bullingdon, Wheatley.

7. Thames. Caversham, *F. A. Lees*. Ilvingden Farm, Goring, etc.

Berks. Cumnor, Marcham.

[*S. distans*, *Bab.* Northants, well established. Gloster W.]

BRIZA. L.

B. media, L. *Quaking Grass. Totter Grass.*

Top. Bot. 494. Syme, E. B. xi. 130. 1774. Nym. 832. Bx. 104.

Native. Pascual, uliginal. Pastures, roadsides, boggy places. Common. P. June.

First record, *Sib.* 1794.

Occurs in all the districts and locally abundant. It is found in the Parks, and plentifully in Marston fields. It flourishes in the driest pasture, and is also found growing in the wet bogs with *Hypnum falcatum*.

POA. L.

P. pratensis, L. *Smooth-stalked Meadow Grass.*

Top. Bot. 492. Syme, E. B. xi. 127. 1771. Nym. 834.

Native. Pascual. Meadows, pastures, waysides, wall-tops, etc. Abundant in all the districts, occurring plentifully on walls in Oxford. P. June, July.

First record, *Sib.* 1794.

Var. *subcærulea*, Gaud.

1. Stour. Tadmarton Heath.

4. Ray. Bicester, Bayswater, Elsfield.

5. Isis. Charlbury, North Leigh.

6. Thame. Wheatley.

Berks. Buckland, *H. Bos.*

Var. *angustifolia*, Gaud.

Gramen pratense paniculatum angustiore folio. From Oxford, *Bobart, Tilleman, Ray*, ii. 1696, see *Ray*, iii. 409; is not unfrequent in woods, especially on the Chilterns, as at Whitchurch, Sunley Wood, Withy Coppice, etc.

P. trivialis, L. *Rough-stalked Meadow Grass.*

Top. Bot. 293. Syme, E. B. xi. 129. 1773. Nym. 834.

Native. Pratal, etc. Pastures, meadows, field-borders. Common in all the districts, and usually found in shadier and damper situations than preceding species. P. June, July. Occurs in the Parks, Christ Church, and Magdalen meadows, etc.

First record, *Sib.* 1794.

A form with smaller and paler florets, and smoother leaf sheaths which occur in damp woods and shady ditches, is probably *P. Koeleri*, D.C. Is this identical with Parnell's *parviflora*?

P. nemoralis, L. *Wood Meadow Grass.*

Syme, E. B. xi. 123. 1768. Nym. 834.

Native. Septal, sylvestral. Hedges, woods. Local. P. April-June.

First record, *Sib.* 1794.

Omitted from *Top. Bot.* Absent or very rare in North Oxfordshire.

4. Ray. Headington Wick Copse! Magdalen College Walks! *H. Bos.* Beckley, Stow Wood.

5. Isis. Wychwood! *H. Bos.* North Leigh, Mill Wood.

6. Thame. Shady ditchside by sandy lane south of Shotover, see *Rep. of Rec. Club*, 1880.

7. **Thames.** Frequent in woods and hedges on the tertiary, as Binfield, Withy Coppice, Maple Durham, Whitchurch, Sunley Wood, depauperated form, Vernal Wood, woods near Clump House, Kidmore End.

Berks. Northants, Gloster E., Warwick.

Var. *angustifolia*, Parn., has also been noticed in the Chiltern Woods. By Withy Coppice a form with narrow erect panicle which may be *coarctata*, Gaud., occurred.

P. compressa, L.

Top. Bot. 492. Syme, E. B. xi. 125. 1770. Nym. 834.

Native. Glareal. Wall-tops, dry fields. Rare, but probably much overlooked. P. June, July.

First record, *Sib.* 1794.

1. **Stour.** Swalecliffe Farm, near Sibford.

3. **Swere.** Adderbury, Banbury, *A. Fr.* Deddington, Charlton, *Rev. Moyle Rogers.* Wadham Wall.

4. **Ray.** Bicester, *A. Fr.* Barton, Elsfield, *H. Bos. /*

5. **Isis.** St. Aldate's Church, walls opposite Pembroke College, *Sib.* extinct. St. Peter's-in-the-East Church walls, *Bz.* Walls below Oxford Castle, Woodstock, Witney, Bampton, Clanfield.

6. **Thame.** Sandford, *J. French.* Headington, *H. Bos.* Dorchester, Wheatley.

7. **Thames.** Lewknor, *A. Fr.* Ilvingden Farm.

Berks. Cumnor. Bucks, Northants, Gloster, Warwick.

P. annua, L. *Annual Meadow Grass.*

Top. Bot. 490. Syme, E. B. xi. 111. 1760. Nym. 837.

Native. Meadows, pastures, roadsides, waste places. Abundant throughout the county. Our commonest plant. A. Flowers all the year round.

First record, *Sib.* 1794.

CATABROSA. P. B.

C. aquatica, P. B. *Water Whorl Grass.*

Top. Bot. 486. Syme, E. B. xi. 94. 1750. Nym. 837. Bz. 252.

Native. Inundatal. Ditch- and pondsides. Local, rather rare. P. May-July.

First record, *Sib.* 1794. *Aira aquatica, L.*

3. **Swere.** Hanwell, *Bees.* Berry Moor, *Gull.*

4. **Ray.** Upper Heyford, *Bz.* Marston Lane, plentiful.

5. **Isis.** Between Church and Long Handborough, *Bz.* Bampton, Clanfield, Foscott.

6. **Thame.** Sandford Lane, *Sib.* Shotover, Hb. Lawson. Cowley.

Bullington Green, *Bx.* South side of Shotover, *H. Bos.* By field-path from Headington Quarries to Shotover, *H. E. Garnsey.*

Berks. Hinksey, *H. Bos.* Radley, *H. E. Garnsey.* Kennington.

HORDEUM. L.

H. sylvaticum, Huds.

Elymus europæus, L.

Top. Bot. 505. Syme, E. B. xi. 192. 1820. Nym. 837. *Bx.* 496.

Native. Sylvestral. Woods, on calcareous or chalky soil. Local. P.

July, Aug.

First record, *Bobart*, 1690, and first as a British plant.

Gr. secalin. majus sylvaticum, R.

2. Ouse. Ardley Wood, *Sib.*, *Elymus europæus, L.*

7. Thames. Stokenchurch, *Bobart* in *Ray*, i. and *Morison*, iii. 1696.

Oxford reference in *Sm. Fl. Br., Eng. Fl., Bot. Guide, N. B. G. Hudson*, etc., specimen in Sherard's herb. found by *Bobart* in Stokenchurch Woods! Henley, *Gough*, ed. ii. Penley Hangings, *Bx.*! Nettlebed, Goring, *H. Bos.*! Watlington, Mongewell, Nuffield, Sunley Wood, Aston Wood.

Berks. Bisham Wood! Bucks, Gloster E., Northants.

H. murinum, L. Wall Barley.

Top. Bot. 506. Syme, E. B. xi. 194. 1822. Nym. 838. *Bx.* 344.

Native. Viatical. Waste places, roadsides, especially about villages.

Common and generally distributed. B. June, July.

First record, *Sib.* 1794.

H. secalinum, Schreb. Meadow Barley.

H. pratense, Huds.

Top. Bot. 505. Syme, E. B. xi. 193. 1821. Nym. 838.

Native. Pratal. Meadows and pastures. Locally common and recorded from all the districts. P. July. Plentiful in the Marston Meadows.

First record, *Sib.* 1794, *H. pratense.*

* * *Secale cereale, L.* Rye.

Alien. Occurs casually by field-borders and waste places, but is not persistent.

TRITICUM. L.

T. repens, L. Twitch. Couch Grass. *Agropyron, Beauv.*

Top. Bot. 502. Syme, E. B. xi. 178. 1810. Nym. 841. *Bx.* 112.

Native. Agrestal. Cultivated ground, field-borders, hedges, etc.

Abundant. P. June.

Occurs too frequently in all the districts, but is much less abundant on the chalk.

First record, *Sib.* 1794.

Baxter records a glaucous variety from Binsey Lane.

An awned form or variety occurring in hedgerows is *T. barbatum*, Duval Jouve.

4. **Ray.** Wood Eaton.

5. **Isis.** Osney.

* * Casual plants of *Triticum vulgare*, V., Wheat, appear for a short time, but are not persistent.

T. caninum, Huds.

Top. Bot. 505. Syme, E. B. xi. 177. 1809. Nym. 541.

Native. Septal. Hedges, wood-borders. Rather rare. P. July.

First record, *Bobart* or *Sherard*, 1690. *Gramen caninum aristatum radice non repente sylvat.* Ray syn. i., also in *Morison*, iii. 176.

2. **Ouse.** Ardley, Sib. Mixbury.

4. **Ray.** Stow Wood, Sib. / Magdalen College Walks, H. E. Garnsey / Elsfield Lane.

5. **Isis.** Tar Wood, Sib. Towing-path side near Oxford, Bx. North Leigh.

6. **Thame.** Between Oxford and Iffley, Bx. Menmarsh Farm, A. Fr.

7. **Thames.** Stokenchurch Woods plentifully, *Bobart*. Also spec. of *Sherard*'s in *Hb. Sherard* labelled,—‘this was first found by me in Stokenchurch Woods.’ References to Oxford may be found in *Huds.*, *Martyn*, *Milne*, etc. Roadside by ‘Flowing Spring’ Dunaden, A. Fr. Penley Hangings, *Hb. Bx.* / Binfield, Nettlebed, Mongewell.

Berks. Boar's Hill, Wootton.

BRACHYPODIUM. P. B.

B. sylvaticum, R. S. *Slender Wood Fescue.*

Top. Bot. 501. Syme, E. B. xi. 173. 1807. Nym. 842.

Native. Septal. Shady places, hedgebanks, etc. Rather common. P. June.

First record, Sib. 1794. *Festuca sylvatica*, Huds.

B. pinnatum, P. B. *Spiked Fescue Grass.*

Top. Bot. 501. Syme, E. B. xi. 175. 1808. Nym. 427. Bx. 448.

Native. Glareal, pascual. Dry calcareous pastures, roadsides, downs, etc. Locally abundant. P. July.

First record, *Bobart*. *Gramen spica Brizæ majus*, C. B. P., 1696. Copses and hedges, common enough about Oxford.

2. **Ouse.** Ardley, Mixbury.

3. **Swere.** Epwell Heath, Bees. Hooknorton, A. Fr.

4. **Ray.** Between Upper Heyford and Northbrook, Bx. Kirtlington Common, W. Wilson Saunders. Middleton Stoney, A. Fr. On Heyford Leys, Bx. Elsfield.

5. **Isis.** Woodstock Park! *J. Sherard in Ray*, iii. 1724, also *Sib.* 1794. Burford Downs! *Dr. Goodenough in Sm. Fl. Br.* Chipping Norton, Charlbury, *A. Fr.* Between Witney and Burford! Between Stonesfield and Woodstock, *Bz.* Leafield, *H. Bos.* Charlbury, Handborough, Coombe, Wootton, Ditchley, Lyneham, Spilsbury, Bampton, Clanfield, Brize Norton, Tainton.

6. **Thame.** Littlemore, *H. E. Garnsey.* Holton Quarries, Bullingdon. References to Oxford are numerous, e.g. *Huds.*, *Ray*, ed. ii. and iii., *Withering*, *Sm. Fl. Br.*, *Bot. Guide*, *Sir J. Smith*, *Mon. Trans. Lin. Soc.*, vol. iv., 1798. *Knapp's Grasses* 'profusely between Cirencester and Oxford and Buckingham and Middleton Stoney!'

In *New Bot. Guide* the Upper Heyford locality is by mistake entered under Northamptonshire. In Sibthorp Sherard's locality is given, and the plant called *Festuca pinnata*.

Berks. Cumnor, Bessillsleigh. Northants, Gloster E., Warwick (?).

LOLIUM. L.

* **L. temulentum**, L. *Bearded Darnel.*

Comp. Cyb. 405. Syme, E. B. xi. 187. 1876. Nym. 844.

Colonist. Agrestal. Cornfields. Very rare. A. June-Aug. First record, *W. Baxter*, 1812.

3. **Swere.** In a back-garden, Cherwell St., Banbury, springing up where hemp seeds used for feeding birds had been littered. *L. arvense*, W., pastures West Adderbury, 'doubtful if this or deformed *perenne*,' *A. Fr.*

5. **Isis.** 'I found this grass on 25th Aug. 1812 by the side of the foot-path leading from Church Handborough to Eynsham,' *W. Bz.*

6. **Thame.** Cowley field. *L. arvense*, *Bz. in Walk.*, Syme, E. B. xi. 188. 1817.

The extra care in cleaning seed-wheat has almost extirpated this noxious weed, and to the same cause we probably owe the decrease of *Caucalis daucoides*, *Bupleurum rotundifolium*, *Adonis*, and *Delphinium*.

* **L. italicum**, A. Br. *Italian Rye Grass.*

Syme, E. B. xi. 186. 1815. Nym. 844.

Alien. Cultivated fields and waste ground. June.

4. **Ray.** Elsfield, Mesopotamia, Marston.

5. **Isis.** Stonesfield.

6. **Thame.** Shotover, *H. Bos.* 1860. Near Iffley.

7. **Thames.** Goring, etc.

First introduced as a Fodder Grass in 1831, . . . *L. multiflorum*, Lam., and cultivated forms of the next species are found among seed crops.

L. perenne, L. *Darnel.*

Top. Bot. 504. Syme, E. B. xi. 185. 1814. Nym. 845. Bz. 116.

Native. Pascual. Pastures, roadsides, cultivated fields, etc. Abundant.
P. June.

Said by Plot, 1677, to have been first sown in the Chiltern part of the county, to have been afterwards brought near Oxford by Mr. Eustace of Islip.

First record, 1666, Merrett, 'a variety with short and narrow leaves near Oxford.'

Sibthorp, 1794, gives a variety *L. compressum*, the *Gram. loliae. spic. brevis et latioribus compressis* of Morison, as an Oxford plant—it is by no means unfrequent. Var. *L. tenue*, Linn., also occurs on Shotover. An aristate form is not uncommon. The Darnel is a very common species occurring plentifully in Oxford by waysides and on walls.

HARDUS. L.

H. stricta, L. *Mat Grass.*

Top. Bot. 507. Syme, E. B. xi. 197. 1824. Nym. 846. Bx. 300.

Native. Ericetal. Heaths. Local and rare. P. June, July.

First record, Sib. 1794.

3. Swere. Furze ground near Hanwell, Gull. Hanwell Heath, Bees.

5. Isis. South Leigh Heath, Sib., extinct. Ramsden Heath, T. Westcombe, extinct. North Leigh Heath, 1885. Finstock Heath, 1885.

6. Thame. Shotover, Sib. Do., Baxt. 'Lost,' H. Bos.

7. Thames. Binfield Heath, 1885.

Berks. Cumnor Hurst, Bx. Northants, absent. Bucks, Gloster W., Warwick.

CL. III. ACOTYLEDONEÆ.

ORD. LXXXIX. EQUISETACEÆ, DC.

EQUISETUM. L.

E. maximum, Lam. *Great Horsetail.*

E. Telmateia, Ehrh. *E. fluviatile*, Sm.

Top. Bot. 531. Syme, E. B. xii. 150. 1888. Nym. 859.

Native. Sylvestral, etc. Wet shady places, woods, hedges, etc. Local.

P. April.

First record, Sib. 1794. *E. fluviatile*.

3. Swere. Wroxton, Hanwell, Gull. Epwell Hill.

4. Ray. Rousham, Bayswater, Beckley, Headington Wick.

5. Isis. Handborough, Cornbury Quarry.

6. Thame. Headington, Horsepath Lane, Shotover Plantations, Stanton St. John, Thame, Albury, Wheatley.

Berks. Chawley Hurst, Bagley.

E. arvense, L. *Field Horsetail.*

Top. Bot. 531. Syme, E. B. xii. 152. 1889. Nym. 859.

Native. Agrestal, etc. Fields, waysides, rail-banks, waste places.

Abundant throughout the county. P. March.

First record, *Dillenius*, 'Hockley in the Hole,' 1746.

The barren stems are often decumbent.

E. sylvaticum, L. *Wood Horsetail.*

Top. Bot. 532. Syme, E. B. xii. 156. 1891. Nym. 859.

Native. Sylvestral. Very rare or extinct. P. April.

First record, *Sib.* 1794. 'Moist woods—shady places in boggy ground.'

6. Thame. Bog on north side of Shotover, *Bx. Stirp. Cryp. Ox.* Not there now.

Berks. Bagley, *Rev. E. Fox*. Boar's Hill, 1885.

See *Ger. Em.* 1115. 633, for an unnamed plant which may be this, the station seems in Berks.

E. limosum, L. *Smooth Horsetail.*

Top. Bot. 533. Syme, E. B. xii. 159. 1893. Nym. 859.

Native. Paludal, lacustral. Ditches, brooks, ponds, etc. Locally abundant, and after *arvense* the commonest species. P. June, July.

First record, *Sib.* 1794.

2. Ouse. Mixbury.

3. Swere. Broughton, *Bees*. Cherwell Mill Meadow, *A. Fr.* Somerton.

4. Ray. Middleton Park, *H. Bos.* Kirtlington, Heyford, Rousham, Marston, Oxford, etc.

5. Isis. Abundant in the Wychwood ponds, Ramsden Heath, Ditchley, Binsey, Port Meadow, etc.

6. Thame. Iffley, Christ Church Meadow, Albury, Rycote, Dorchester, etc.

7. Thames. Goring, South Stoke, etc.

Var. *E. fluviatile*, L.

3. Swere. Cropredy.

4. Ray. Marston Meadows, Otmoor.

5. Isis. Eynsham, near Chimney, Wolvercote.

6. Thame. Dorchester.

7. Thames. North Stoke.

E. palustre, L. *Marsh Horsetail.*

Top. Bot. 533. Syme, E. B. xii. 157. 1892. Nym. 860.

Native. Uliginal and paludal. Marshy, boggy places. Local. P. June-Aug.

First record, *Dillenius*, 1746, and *Sir Jos. Banks*, 1760, near Oxford.

3. **Swere.** Between Newington and Wroxton, *Gull.* Hardwick Road, Milton, Adderbury, *A. Fr.*
4. **Ray.** Headington Wick, *Rev. R. Linton.* Bicester, Noke, bog under Stow Wood.
5. **Isis.** North Leigh, Wychwood, Bruern, Osney, Eynsham.
6. **Thame.** Bullingdon Green, Shotover, *Bx. Stirp. Cr. Ox.* Hockley-in-the-Hole, *Dillenius.* Thame, *Hb. Bx.* Abundant on north side of Shotover, 1885, and by railside near Wheatley.
7. **Thames.** Binfield Heath, Woodcote Heath.

Var. *E. nudum*, Newm. non Duby. Woodcote Heath.

Var. *E. polystachyum*, Syme. Gravelly pondside near Duke's Lock, above Wolvercote.

ORD. XC. FILICES, DC.

PTERIS. L.

P. aquilina, L. *Bracken.*

Top. Bot. 520. Syme, E. B. xii. 145. 1886. Nym. 861.

Native. Ericetal. Heaths, woods on sandy soil. Found in all the districts, but missing large tracts of the oolitic portion of north Oxon and the gault of the south. Plentiful on the high level gravels and tertiary deposits, and also on the Portland sands. P. July, Aug.

First record, *Sib.* 1794.

BLECHNUM. L.

B. spicant, Roth. *Hard Fern. Lomaria, Desv.*

Top. Bot. 520. Syme, E. B. xii. 143. 1885. Nym. 862.

Native. Ericetal. Heaths, woods. Very rare and decreasing. P. July.

First record, *Sib.* 1794. *Acrostichum spicant*, *Sib.*

5. **Isis.** Near Charlbury, *T. Westcombe.* Bruern Wood, 1885.

6. **Thame.** Shotover, *Sib.* 1794, do. in *Bx. Stirp. Cr. Ox.*; still there in 1885.

Berks. Bagley, Shadwell Copse, Boar's Hill.

SCOLOPENDRIUM. Sm.

S. vulgare, Sym. *Hart's-tongue.*

Top. Bot. 520. Syme, E. B. xii. 141. 1884. Nym. 862.

Native. Sylvestral, etc. Woods, hedge-banks, old quarries, old wells, etc. Local. P. July, Aug.

First record, *Sib.* 1794. *Asplenium Scolopendrium, L.*

2. Ouse. Ardley.
3. Swere. Frequent in mouths of old wells, *Gull*. Wroxton Cascade, *Bees*. Hanwell, well at Milton, var. *multifida*, North Newington! Little Bourton, Barford St. John, *A. Fr.* Hooknorton.
4. Ray. Ditches behind Holywell Church, *Sib.* Stow Wood! Bayswater! *H. Bos.* Tackley, railside.
5. Isis. Yarnton, *J. Chaundy*. Stonesfield, Wychwood, Cornbury, Fifield.
6. Thame. Shotover, *Sib.*, do., *Bx. Stirp. Cr. Ox.*; there in 1885, and the plantations.

ASPLENIUM. L.

A. Trichomanes, L. Maiden-hair Spleenwort.

Top. Bot. 518. Syme, E. B. xii. 131. 1878. Nym. 862.

Native. Rupestral. Old walls, bridges. Local and rare. P. May-Sept.

First record, *Wm. Coles*, 1657.

3. Swere. Adderbury Church, *Wm. Coles*. Drayton Church, *Gull*. Walls at Little Bourton, Adderbury West and East, Broughton, 1885.
 4. Ray. New College Wall, *Wm. Coles* in *Adam in Eden*. Stow Wood, *Sib.* Bayswater, *H. Bos.* Charlton, *Rev. M. Rogers*. Oddington, Lower Heyford.
 5. Isis. Cornbury Quarry! Stanton Harcourt, *Sib.* Woodstock, *Rogers*. Folly Bridge, *H. Bos.* 1851. Godstow.
- Berks. Wytham.

A. lanceolatum, *Huds.*

Top. Bot. [23]. Cyb. iii. 281; Oxon discarded. Syme, E. B. xii. 119. 1873. Nym. 863. Extinct. Error or alien.

First record, *Bobart*, 1699. *Filix elegans*, *Adiantum nigro accedens*, *segmentis rotundioris* a D. Bobarto inventa est in porticu Ecclesiæ Adderburyensis, Comit. Oxon, qua septentrionem spectat., *Ray*, iii. 127.

See also *Morison*, iii. 581, *Hook*, *B. F.* Have carefully examined walls of the church, but have not been able to find the plants, *T. B.*, do., *A. Fr.* 1876. On a specimen of *A. lanceolatum* in *Hb. Sher.* is a label, 'Has since been found near Banbury.'

References to the Oxford record are also given in *Sm. Eng. Fl.*, *Martyn*, *Newman Ferns*, 'doubtless an error,' etc.

'*W. G. F. P.*, of the Coppice, Henley, has sent two small plants of *A. lanceolatum*, found on the wall of a cottage garden near Henley,' *Phyt. n. s.* vol. vi. 285.

Gloster W.

A. Adiantum-nigrum, L. *Black Spleenwort.*

Top. Bot. 519. Syme, E. B. xii. 121. 1874. Nym. 863.

Native. Rupestral. Quarries, walls, etc. Rare. P. June-Sept.

First record, *Sib.* 1794.

3. Swere. Milcomb Church, *T. Bees*. Well at Tadmarton, about Adderbury, Adderbury Mill, *A. Fr.* Great Tew, *Rev. E. Fox*.

4. Ray. , Near Stow Wood, *Sib.*, do., *Bz. St. Cr. Ox.* Lower Heyford Canal Bridge, Oddington.

5. Isis. Cornbury Quarry, *Sib.* 1885. Canal Bridge near Port Meadow, 1885.

6. Thame. Shotover north side, *Bz. St. Cr. Ox.*, do., *H. Bos.* Very fine specimen approaching *A. acutum*.

7. Thames. Pyrtton, *H. Bos.* Henley Park Hill, *Sib.*

A. Euta-muraria, L. *Wall Rue.*

Top. Bot. 519. Syme, E. B. xii. 135. 1880. Nym. 864.

Native. Rupestral. Walls. Not uncommon. P. May-Sept.

First record, *Sib.* 1794.

3. Swere. Hornton Church, *T. Bees.* and *E. Walford*.

4. Ray. Magdalen College Wall, *Sib.* Rousham! *H. Bos.* Charlton, *Rev. M. Rogers.* Heyford Bridge.

5. Isis. Cornbury, Blenheim, Woodstock.

6. Thame. Stanton St. John, *H. Bos.* Clifton, *Rev. F. Bennett*.

7. Thames. Aston Rowant, *Hb. Bz.* Caversham, *F. A. Lees.* Sonning, Maple Durham, Goring, Whitchurch.

Berks. Marcham, Streatley.

ATHYRIUM. Rth.

A. Filix foemina, Rth. *Lady Fern.*

Top. Bot. 517. Syme, E. B. xii. 108. 1869. Nym. 865.

Native. Sylvestral. Damp shady woods. Local. P. June, July.

First record, *Sib.* 1794. *Polypodium Filix foemina*, L.

3. Swere. Hanwell Plantation, *Bees*.

4. Ray. Bog near Stow Wood, *H. Bos.*

5. Isis. Eynsham Heath, *Sib.* Mill Wood, Freeland, Wychwood, Woodstock, Bruern Wood.

6. Thame. Shotover Hill near the Spring, *Sib.*

7. Thames. Chinnor, Sunley Wood, Lewknor, Vernal's Wood, Cowleaze Wood, Great Wood, Queen's Wood, Ipsden Wood.

Berks. Bagley, Powder Hill Copse.

Var. *A. molle*, Roth.

4. Ray. Headington Wick Copse.

7. Thames. Sunley Wood.

Var. *A. convexum*, Newm. *A. rhaticum*, Roth. *A. erectum*, Syme.

5. *Isis*. Bruern Wood.

ASPIDIUM. Sw.

A. angulare, Kit.

Syme, E. B. xii. 95. 1861. Nym. 865.

Native. Sylvestral. Dry woods. Local. P. July, Aug.

First record, *H. Boswell*, 1859.

3. *Swere*. Hooknorton.

4. *Ray*. Stow Wood, *H. Bos.*

6. *Thame*. Nuneham, *H. Bos.* 1859! Shotover.

7. *Thames*. Stokenchurch Woods, Chequer's Common.

Berks. Powder Hill Copse, *H. Bos.* *Bucks*, Northants, *Gloster*, *Warwick*.

It appears difficult to draw a line of separation between this and the two following ferns, so many intermediates occur.

A. aculeatum, Sw. Prickly Shield Fern.

Top. Bot. 513. Syme, E. B. xii. 92. 1860. Nym. 865.

Native. Sylvestral, septal. Dry woods, hedge-banks, etc. Local. P. P. July, Aug.

First record, *Morison (Bobart)*, iii. p. 579, 1699. *Filix mas aculeata*, 'about Oxford.'

2. *Ouse*. Hethe.

3. *Swere*. Hardwick Hill, Hanwell, *Bees*. Crouch Lane, *A. Fr.*

4. *Ray*. Rousham, *Rev. E. Fox*.

6. *Thame*. Shotover, *H. Bos.*! 1884.

7. *Thames*. Penley Hangings, Stokenchurch Woods.

A. lobatum, Sw. Prickly Shield Fern.

Comp. Cyb. 409. E. B. 1563. Nym. 865. Syme, E. B. 93.

Native. Woods, hedges. Local and rare. P. July, Aug.

First record, *Sib.* 1794. *Polypodium lobatum*, *Huds.*

3. *Swere*. Hardwick Hill, *Gull*.

5. *Isis*. Wilcot Woods, *Sib.* Cornbury Ponds and Quarry! *T. West-combe*.

6. *Thame*. Shotover Plantations, *Sib.*! 1884. Tiddington, *Hb. Br.*

A. Filix mas, Sw. Male Fern. Nephrodium, Rich.

Top. Bot. 515. Syme, E. B. xii. 57. 1850. Nym. 865. *Lastrea*, Pres.

Native. Sylvestral, septal. Woods, hedges, etc. Common and generally distributed. P. June, July.

First record, *Sib.* 1794. *Polypodium Filix mas*, L.

Occurs in Christ Church Meadow; probably planted.

Var. *A. Borreri*, Newm. *Lastrea paleacea*, Moore.

5. *Isis*. Bruern Wood.

7. *Thames*. Nuffield, Sunley Wood, Ibstone.

Berks. Powder Hill Copse, *H. Bos*.

Var. *affine*, Fisch.

5. *Isis*. Bruern Wood.

7. *Thames*. Binfield Heath, *Rep. of Rec. Club*, 1881. Wood above Goring.

Both the above varieties occurred with typical *Filix mas*.

A. spinulosum, Sw. *Narrow Shield Fern*. *Prickly Toothed Shield Fern*.

Top. Bot. 23 (?). Syme, E. B. xii. 76. 1855. Nym. 866.

Native. Sylvestral. Damp woods, thickets. Local. Rather rare. P. June, July.

First record, *Sib*. 1794, *Polypodium cristatum*, L.; this included if it did not refer to *dilatatum*, Sw.

4. *Ray*. Headington Wick Copse.

5. *Isis*. Freeland Wood, Bruern Wood, var. *exaltata*, L.

6. *Thame*. Shotover, *Hb. Lawson*, *H. Bos.*, *Sib*. north side!

7. *Thames*. Penley Wood, Binfield, Sunley Wood.

Berks. Boar's Hill, *H. Boswell*. Eng Wood.

A. dilatatum, Sw. *Broad Shield Fern*.

Top. Bot. 517. Syme, E. B. xii. 82. 1857. Nym. 866.

Native. Sylvestral. Woods, thickets. Local. P. Aug., Sept.

First record, *W. Baxter* in *Purton*, 1821.

1. *Stour*. Tadmorton.

3. *Swere*. Bellows Cove Adderbury, *Mr. Lamb*. Great Barford, *A. Fr.* Hanwell, *T. Bees*. Epwell Heath.

4. *Ray*. Headington Wick, and probably var. *tanacetifolia*, Moore.

5. *Isis*. Eynsham, *Bx.* 'spinulosum.' Wychwood, *H. Bos.* Freeland Wood, *Rep. of Rec. Club*, 1881. Bruern Wood.

6. *Thame*. Shotover, *Bx.*, do., 1885; fine specimen.

7. *Thames*. Chinnor, Binfield, Sunley Wood, Penley Wood.

Berks. Powder Hill Copse, Bagley.

A. Oreopteris, Sw. *Mountain Shield Fern*.

Lastrea, Pr. Top. Bot. 515. Syme, E. B. xii. 54. 1849. Nym. 866.

Native. Ericetal. Dry heathy places. Very rare or extinct. P. July.

First record, *Sib*. 1794. *Polypodium Oreopteris*, *Sib*.

5. *Isis*. Ramsden Heath; extinct (?). *T. Westcombe*.

6. *Thame*. North side of Shotover, *Sib.*, extinct (?). South-east side of Shotover, *H. Bos*. 1859. Baxter found it on the north side in 1819. It was last seen near the ochre pits about 1870.

7. Thames. Singularly absent from the heaths on the Chilterns (?).

Berks. Powder Hill Copse, *H. Bos.* 1867, and Bagley, 1858.

Northants, extinct (?). Gloster W., Warwick.

[*A. Thelypteris*, *Sib.* Wytham Woods, *Morison*, 1699. Windsor Park, Sunninghill Wells, *Brit.* Berks, Warwick, Northants, extinct.]

CYSTOPTERIS. *Bernh.*

* *C. fragilis*, *Brn.* *Brittle Bladder Fern.*

Syme, E. B. xii. 101. 1864. Nym. 867.

Native (?). Rupestral. Walls. Very rare. June.

First record, South Newington Church near Banbury, 1871, *Rev. J.*

Whitehead in *Hb. Br. Mus.* and *E. B. Penfold* in *Jour. Bot.* ix. 305.

There is a tradition of its occurring in Wychwood Forest.

Gloster E., Warwick.

POLYPODIUM. *L.*

P. vulgare, *L.* *Common Polypody.*

Top. Bot. 509. Syme, E. B. xii. 38. 1842. Nym. 867.

Native. Septal, etc. Walls, banks, hedges, tree trunks, pollard willows, etc. Common and generally distributed. P. Aug.-Oct.

First record, *Wm. Coles*, 1657.

Adderbury Church Yard, *Adam in Eden.*

This after *Filix mas*, and *Pteris*, is our commonest fern. It is still found in and close to Oxford, as on pollard willows, in the Parks and Mesopotamia.

Gulliver included a serrate variety, *P. serratum*, W., which is not uncommon.

P. Robertianum, *Hoff.* *Limestone Polypody.*

P. calcareum, Sm. *Phegopteris calcarea*, Fee. *P. Dryopteris* (L.), Sib.

Top. Bot. 510. Syme, E. B. xii. 48. 1846. Nym. 868.

Native. Rupestral. Damp rocky ground. Very rare. P. June.

First record, *Bobart*, 1699, vol. iii. 580.

5. Isis. Cornbury Quarry, *Bobart*; *Sib.* 'Dryopteris,' 1794; *H. Bos.*

1858; *Prof. Lawson* and *Dr. Cradock*, 1871; still there in 1885.

Bucks near Wycombe, *Brit.*, Gloster E.

This has been sometimes erroneously recorded as *Dryopteris*, L.

[*P. Dryopteris*, L. *Oak Fern.*

Syme, E. B. xii. 46. 1845.

Bollard's Wood, near Stokenchurch, just in Bucks, *Rev. A. Robertson* and *E. Armstrong*, M.A., 1883, still there in 1885. See *Journ. Bot.* 1873, p. 229.

Gloster W., Warwick, planted.]

[*P. Phegopteris*, L. Gloster E.]

CETERACH. W.

C. officinarum, W. *Scaly Spleenwort.*

Top. Bot. 508. Syme, E. B. xii. 139. 1883. Nym. 868.

Native. Rupestral. Dry walls. Local. P. April-Oct.

First record, *Sib.* 1794, *Asplenium Ceterach*, L.

3. Swere. Wall near Adderbury Mill, *A. Fr.* Tadmarton, *E. Walford*.

4. Ray. Wall behind Holywell Church, *Sib.* Upper Heyford, *Rev. E. Fox*.

5. Isis. Hailey, *H. Bos.* Wychwood, *T. Westcombe*. Woodstock, Blenheim.

6. Thame. Old wall at Cowley, *Wheeler in Purton*, 1821, *do.*, *Bx.* *St. Cryp. Ox.* Bullingdon Green, Sandford, *Bx.*

Berks. Wytham, Buckland, *H. Bos.* Abingdon, see *Rep. of Rec. Club*, 1881.

[*Osmunda regalis*, L. *Flowering Fern.*

This is given in Top. Bot. for Oxfordshire, but there must be some error, since neither *Beesley's List* nor *Sibthorp's Flora* (these works forming the source from which Mr. Watson derived his Oxon records) contain it, nor is there any other record.

Berks. Coleman's Moor, Earby Heath, Bagshot Heath, Highclere, *Brit.* Bucks, Northants, extinct. Warwick.]

BOTRYCHIUM. Sw.

B. Lunaria, Sw. *Moonwort.*

Top. Bot. 523. Syme, E. B. xii. 24. 1837. Nym. 870.

Native. Pascual. Dry grassy pastures and heaths. Very rare. P. May-July.

First record, *Lunaria minor ramosa*, three miles from Oxford, near the Blind Pinnock; *Lunaria minor*, in several places near Oxford, *Merrett*, 1666. *Lunaria racemosa minor et vulgaris*, C. B. P. ad montem Shotover, *Morison*, 1699.

5. Isis. In several parts of Wychwood Forest, *Blackstone*, see also *Martyn*, *Gough*, *B. G.*, etc. Near Widley Wood, *F. T. Richards* and *Bolton King*, 1883! North Leigh Heath, *Sib.* Wychwood, 1884.

6. Thame. South side of Shotover, *Sib.*, *do. Bx.* in *Purton* about 1815, still there in 1874. Nuneham, *W. R. Linton*, 1873.

7. Thames. Nettlebed Common, *T. Hopkins*, M.A. Ibstone Common.

Berks. Near Radley. Bucks (?). Northants, Gloster E., Warwick. *Merrett* also says several places in Oxfordshire, his *minor ramosa* was probably the var. *B. incisum*, *Milde*, *Native Ferns*, vol. ii. Tab. 766.

OPHIOGLOSSUM. L.**O. vulgatum, L.** *Adder's Tongue.*

Top. Bot. 524. Syme, E. B. xii. 19. 1835. Nym. 870.

Native. Pascual. Meadows, grassy places in woods. Locally common.
May-July.First record, *Wm. Coles*, 1657.3. **Swere.** King's Mill, *Gull*. Wroxton, *Bees*. Wickham, Hanwell,
Bloxham Road, *A. Fr.* Souldern, *Mrs. Gough*.4. **Ray.** In a close or meadow near to a small village called Barton,
between Oxford and Stow Wood, *Coles*. Headington, *Sib.* Near
Kidlington and Islip, *H. Bos. Phyt.* v. 157. Blackthorn, *H. Bos.*
Headington Copse, *Bz.* Noke Meadows.5. **Isis.** South Leigh, *Sib.* In a close near Botley, *Coles*, 1657, do.,
Sib. 1794. Near Bampton, *H. Bos.* Summertown, *H. Peake.*
Meadow above Wolvercote, *Rev. F. Bennett.* Wychwood.6. **Thame.** Cowley, *Sib.*, do. *Daubeny*, 1842.7. **Thames.** Chinnor Common, *Dr. Ayres.* North Stoke, Watlington
Wood, 1885.**Berks.** Hinksey Meadow, Radley.

ORD. XCI. LYCOPODIACEÆ, DC.

LYCOPodium. L.**L. clavatum, L.** *Club Moss.*

Top. Bot. 525. Syme, E. B. xii. 16. 1833. Nym. 872.

Native. Ericetal. Heathy places. Very rare. P. July, Aug.

First record, *Dillenius*, 1761.6. **Thame.** In monte Shotover, 1761, *Dillen. Hist. Muscorum.* North
side of Shotover, *Sib.* 1794, do., *Bz.* in *Purton*, 1819, do. *H. Boswell*,
1866, now extinct (?).7. **Thames.** Nettlebed, in wood near Windmill, *Sib.* Woods above
Shierburn, *Rev. E. Fox.***Berks.** Bucks, Warwick, Gloster E., Northants, Harleston.**L. Selago, L.** *Fir Club Moss.*

Top. Bot. 527. Syme, E. B. xii. 13. 1830. Nym. 872.

Native. Ericetal. Extinct. Heathy places. P. April.

First record, *Sib.* 1794, showed to him by James Benwell.6. **Thame.** On the north side of Shotover Hill, *Sib.* Exactly in place
pointed out by Dr. Sibthorp in 1819, *Bz.* in *Purton*, Baxter noticed
it till 1822. Bucks doubtful, Warwick extinct.

[*L. inundatum*, *L.*

Berks. Virginia Water, Bagshot Heath, Greenham Common, *Brit. Bucks, Warwick.*]

[*L. complanatum*, *L.* Gloster E., near Stroud.]

ORD. XCII. CHARACEÆ, Rich.

CHARA. *L.*

***C. fragilis*, Desv.**

Syme, E. B. xii. 213. 1920. Groves', pl. i., 'Oxon.'

Native. Lacustral. Ditches and rivers. Local. June, July.

First record, *Linton*, sub nom. *fatida*, first localised record, *the Author*, 1883.

Var. *Hedwigii*, Ag. in Bruzel.

4. Ray. Canal near Kidlington, type.

5. Isis. Port Meadow, Binsey, Osney, type.

6. Thame. Near South Hinksey, Oxon, *Hedwigii*.

7. Thames. Thames at Moulsoford, *Hedwigii*.

Berks. South Hinksey, *Hedwigii*. Bucks, Warwick, Northants.

***C. hispida*, L.**

Syme, E. B. xii. 206. 1916. Groves', pl. vii., 'Oxon.' Nym. 874.

Native. Lacustral. Ponds, pools, marshes. Rare. June-Sept.

First record, *Equiset. seu Hippuris coralloides Ray's Hist.* 1686. This may be *fatida* or *Hedwigii*.

4. Ray. Peat Bogs under Headington Wick Copse, *Sib.* '*C. tomentosa*.' Lower Heyford to Kirtlington.

5. Isis. Eynsham Ferry, *Ray* (?). Near Besselsleigh, Dill. Ray (?) as to identity, and whether Oxford or Berks. Ponds on Botley Road, *Bx. in Purton*. Bogs at Cornbury, Wychwood, *Gough*, ed. ii. Ditchley Park, 1884.

6. Thame. Old Gravel Pits, St. Clement's, *Bx.*

Messrs. Groves inform me there is a specimen in *Sir J. E. Smith's Herb.* collected by *Dr. G. Williams* in Oxon in 1799.

Northants, Gloster E.

***C. vulgaris*, L.**

Syme, E. B. xii. 203. 1914. Groves', pl. viii. Nym. 875.

Native. Lacustral. Ponds, ditches, marshes. Common. P. June-Aug.

First record, *Wm. Coles*, 1657. Bog about half a mile from Stocken House in Stow Wood, by Oxford, by the road that goeth to Islip, with *Mr. Wm. Brown, Adam in Eden*.

Generally distributed.

Var. *papillata*, Wall.

5. Isis. Port Meadow.

Berks. Abingdon, etc. Bucks.

Var. *longibracteata*, Kütz.

4. Ray. Noke, Marston, Merton.

5. Isis. Port Meadow.

Berks. Abingdon.

Var. *refracta*, Kütz.

5. Isis. A form approaching above variety, fide Groves near Wolvercote.

C. contraria, A. Br.

Syme, E. B. xii. 204. 1915. Nym. 875.

Native. Lacustral. Slow streams. Rare. July, Aug.

First record, *the Author*, 1883.

5. Isis. Port Meadow.

Northants, near Peterborough.

NITELLA. Ag.

N. opaca, Agar.

Syme, E. B. xii. 178. 1900. Groves', pl. xix. Nym. 877.

Native. Lacustral. Ponds and shallow streams. Very rare. May, June.

First record, *the Author*, 1884.

5. Isis. Near Bampton, near Clanfield.

7. Thames. Pond near Penley Hangings.

Mem. French's record, 'brook near Grimsbury Wharf,' on faith of which it is given as an Oxford plant in Groves' list, would appear to be a Northamptonshire locality.

Bucks, Northants.

N. flexilis, Ag.

Syme, E. B. xii. 174. 1899. Groves', pl. xviii. Nym. 877.

Native. Lacustral. Ditches. Very rare. June.

First record, *M. T. Masters*, 1855.

6. Thames. Ditch beyond railway bridge near South Hinksey, 1855.

M. T. Masters MSS.

Warwick.

[*Tolypella intricata*, Leon. Yardley Gobion, Northants.]

SUMMARY.

The Native plants of Oxfordshire number 818 species :—

Denizens	.	.	.	.	49	"
Colonists	.	.	.	.	43	"
					Total	
	.	.	.	.	910	"
Extinct	.	.	.	.	17	"
Ambiguities and Errors	.	.	.	.	19	"
Casuals and Aliens	.	.	.	.	169	"

About 310 Varieties have also been noticed.

The extinct species are *Ranunculus Sardous*, *Genista anglica*, *Drosera*, *Hypericum Elodes*, *Trigonella*, *Myriophyllum alterniflorum*, *Tordylium*, *Asarum*, *Leucojum vernum*, *Eriophorum vaginatum*, *Phleum paniculatum*, *Bromus madritensis*, *Asplenium lanceolatum*, *Lycopodium Selago*, *Equisetum sylvaticum*, *Arabis Turrita*, *Leonurus*. Of the above 7 were natives, the others being doubtfully named or introductions.

The ambiguities are *Cardamine impatiens*, *Viola lutea*, *Campanula latifolia*, *C. patula*, *Salix ambigua*, *S. acuminata*, *Potamogeton gramineus* (*heterophyllus*), *P. obtusifolius*, *Aceras anthropophora*, *Allium oleraceum*, *Carex Oederi*, *C. stricta*, *C. teretiuscula*, *Scrophularia vernalis*, *Senecio viscosus*, *Hieracium murorum*, *Chenopodium ficifolium*.

Plants which have become very rare with us and which I have not personally seen in the county are *Anemone Pulsatilla*, *Adonis*, *Sisymbrium Sophia*, *Viola palustris*, *Moenchia*, *Tilia platyphyllos*, *Astragalus danicus*, *Potentilla argentea*, *Rosa sepium*, *Cotyledon*, *Cicuta*, *Gnaphalium dioicum*, *Pulicaria vulgaris*, *Crepis fetida*, *Jasione*, *Vaccinium Myrtillus*, *Gentiana campestris*, *Limosella*, *Teucrium Scordium*, *Plantago Coronopus*, *Chenopodium ficifolium*, *C. urticum*, *Euphorbia platyphyllos*, *Salix repens*, *Potamogeton rufescens*, *Alisma ranunculoides*, *Herminium*, *Juncus squarrosus*, *Carex strigosa*, *Oreopteris*, *Lycopodium clavatum*.

In vol. iv. of *The Cybele* the number of species for the whole of Great Britain is reckoned as 1425. Adopting for the purpose of comparison the same specific limits, we have in Oxford 854 species of the following 'types of distribution.' Vide Comp. Cyb. vol. iv. pp. 399-519, and Comp. Cyb. 23-32.

	Great Britain.	Oxford.
British	532	469
English	409	308
Intermediate	37	8
Scottish	81	7
Highland	120	
Germanic	127	51
Local or doubtful	49	9
		854
		1355

In Topographical Botany, ed. i. vol. ii. pp. 665-710, is a comital census of British plants showing in a tabular form the comparative distribution of the British species. Adopting this as a standard we find that—

Of the 239 species found in 90 to 110 counties and vice-counties of Britain, Oxford has 238, the missing species being *Drosera*, which has been extirpated during the present century.

Of the 129 species found in 80 to 90 counties we have 126, *Comarum*, *Narthecium*, and *Scirpus cæspitosus* being absent.

Of the 124 species found in 70 to 80 counties we have 117, the missing ones being *Equisetum sylvaticum*, *Genista anglica*, *Eriophorum vaginatum*, *Osmunda*, *Plantago maritima*.

Of 113 species found in 60 to 70 counties we have 96, the inland species missing being *Empetrum*, *Ranunculus Sardous*, *Carex curta*, *Dryopteris*, *Chrys. alternifolium*.

Of 107 species found in 50 to 60 counties we have 79, the inland desiderata being *Vacc. Oxycoccus*, *V. Vitis Idæa* *Orobanchæ major*, *Utric. minor*, *Viola lutea*, *Elodes*, *Thalic. minus*, *Trollius*, *Geran. sanguineum*, *Campan. latifolia*, *Potam. heteroph.* *Sagina subulata*, *Prunus Padus*, *Listera cordata*, *Pilularia*, *Rubus saxatilis*, *Myrioph. altern.*, *Crepis paludosa*, *Lycopod. inundatum*.

Of the 104 species found in 40 to 50 counties we have 73, *Mentha rotund.*, *Dros. anglica*, *D. intermedia*, *Carex lævig.*, *Lycop. alp.* *Selaginella* *Dianthus deltoidea*, *Card. heterophyll.*, *Carex distans*, *Allosurus*, *Hymenoph. Wilsoni*, *C. teretiuscula*, *Geran. sylvaticum*, *Wahlenbergia*, *Habenaria alba*, *Ran. Lenormandi*, *Sax. hypnoides*, *Thelypteris* being absent.

Of the 84 species found in 30 to 40 counties we have 43, the special absentees being *Allium oleraceum*, *Potamogeton obtusifol.*, *Equiset. hyemale*, *Diplotaxis tenuifol.*, *Myosotis sylvatica*, *Calam. lanceolata*, *Carex stricta*, *Linum angustifolium*, *Hypochaeris glabra*, *Pyrola media*.

Of the 109 species found in 20 to 30 counties we have 59, *Gent. Pneumonanthe*, *Spargan. minimum*, *Impatiens Noli.*, *Trigonella*, *Salix acuminat.*, *Camp. patula*, *Lastrea æmula*, *Scirpus uniglumis*, *Cardamine impatiens*, *Potam. plantag.*, *Gastridium*, *Vicia Orob.*, *Arnoseris*, being notable exceptions.

Of the 11 plants recorded for 19 counties we have *Fumaria Boræi*, *Cineraria campestris*, and *Polypod. calcareum*.

Of the 10 plants recorded for 18 counties we have *Polyg. vulgaris*, *Tilia parvifol.*, *Orchis incarnata*.

Of the 16 plants found in 17 counties we have *Fumaria confusa*, *Epilobium tetragonum*, *Gal. erectum*, *G. elongatum*.

Of the 17 plants found in 16 counties we have *Pulsatilla*, *Fumaria muralis*, *Cynoglos. sylvaticum*, *Chen. ficifol.* (†).

Of the 10 species found in 15 counties we have *Fumaria parviflora*, *Viola tricolor*, *Filago apiculata*, *F. spathulata*.

Of the 20 species found in 14 counties we have *Orchis latifolia*, *Polygala oxyptera*, *Vicia gracilis*, *Polyg. maculatum*, *P. mite*.

Of the 23 species found in 13 counties we have *Iberis*, *Crepis foetida* (?), *Tarax. erythrosp.* *Ophrys aranifera*, *Potam. zosterifol.*

Of the 22 species found in 12 counties we have *Helleborus foetidus*, *Draba brachycarpa*.

Of the 22 species found in 11 counties we have *Polygala calcarea*, *Ulex nanus*.

Of the 13 species found in 10 counties we have *Erod. moschatum* (?), *Teucrium Scordium*, *Crepis taraxacifolia*.

Of the 18 species found in 9 counties, none.

Of the 24 species found in 8 counties we have *Fumaria Vaillantii*, *Viola lactea*, *Gentiana germanica*, *Potamogeton compressus*.

Of the 32 species found in 7 counties we have *Calamintha Nepeta*.

Of the 27 species found in 6 counties, none.

Of the 29 species found in 5 counties we have *Leucojum*, *Daphne Mezereum*, *Adonis*.

Of the 31 species found in 4 counties we have *Orchis militaris*.

Of the 37 species found in 3 counties we have *Stachys germanica*, *Lythrum Hyssopifolia*.

Of the 50 species found in 2 counties we have *Thlaspi perfoliatum*, *Tilia grandifol.* (?), *Salvia pratensis*, *Ballota nigra* (ruderalis), *Orchis Simia*, *Rosa sepium* (?).

The census numbers given in Top. Bot. are however now much too small, many additional county records having been made since Mr. Watson compiled the census quoted from.

Comparing Oxford with the border counties we find that Bucks has 35 species not recorded for Oxon. Of these 12 are doubtful, *Sagina subulata*, *Comarum*, *Chrysos. altern.*, *Melampyrum cristatum*, *Myrica*, *Aceras*, *Lycop. Selago*, *Stellaria nemorum*, *Utric. intermedia*, *Hierac. murorum* and *Orchis purpurea*. The species found in Bucks alone of the border counties are *Dentaria*, *Carum Bulbocastanum*, *Impatiens fulva*, *Dryopteris*.

The Flora of Bucks is very imperfectly known, Oxford having 133 species not recorded for the former county.

Berks has 48 species not on record for, or extinct in Oxford, 12 needing confirmation—*Linum angustifolium*, *Rubia peregrina*, *Filago gallica*, *Gentiana Pneumonanthe*, *Aceras*, *Dianthus prolifer*, *D. deltoides*, *Trigonella*, *Lathyrus palustris*, *Pot. obtusifolius*, *P. heterophyllus*, *Apera Spica-Venti*. The species found in Berks alone of the border counties are *Silene conica*, *Verb. Lychnitis*, *Ornithog. pyrenaicum*, *Scirpus uniglumis* (?), *Agrostis setacea*.

Oxford has 59 species not on record for Berks.

Gloster East has 27 species unrecorded or extinct in Oxford, *Linum angustifol.*, *Prunus Padus*, *Pot. obtusifolius*, *Erioph. vaginatum*, *Melica nutans*, *Scilla autumnalis* needing confirmation. Of the remainder *Vicia Orob.*, *Rubus saxatilis*, *Cenanthe pimpinelloides*, *Mentha pubescens*, *Cephalanthera rubra*, *Polygonatum officinale*, *Carex digitata*, *Phegopteris*, *Lycopodium complanatum* are found in Gloster alone of the border counties.

Its Flora is only imperfectly known, Oxford having 150 species not recorded for that division.

Warwickshire has 85 species not recorded for Oxon. There are very great doubts as to the correct identity of *Draba inflata* and *Lamium intermedium*. *Impatiens*, *Prunus Padus*, *Circœa alpina*, *Dryopteris* were probably planted. *Hypochaeris glabra*, *Elatine*, *Carex Boeninghaus.* *C. stricta*, *Equisetum hyemale* are extinct, and *Silene nutans*, *Medicago denticulata*, *Apera Spica Venti* are casuals, leaving 72 species, of which 12 are *Rubi*, unrecorded for Oxon. The plants found in Warwick alone of the border counties are *Barbarea arcuata*, *Cardamine impatiens*, *Stellaria umbrosa*, *Schleranthus perennis*, *Geranium sylvaticum*, *Arctium nemorosum*, *Crepis paludosa*, *Campanula patula*. *Vacc. Oxycoccus*, *V. Vitis Idæi*, *Scroph. Erharti*, *Empetrum*, *Salix acuminata*, *S. laurina*, *Sparganum minimum*, *Crocus nudiflorus*, *Juncus Gerardi*, *Scirpus glaucus*, *Carex Erhartiana*, *C. elongata*, *C. distans*, and *Gastridium*.

Oxford has 88 species not recorded for Warwick.

Northamptonshire has on record 41 species not recorded for or extinct in Oxon. Of these 12, *Drosera*, *Linum perenne*, *Genista anglica*, *Comarum*, *Hypochaeris glabra*, *Ajuga Chamæpitys*, *Stratiotes*, *Osmunda*, *Thelypteris*, *Pilularia*, *Cladium*, are extinct. *Silene nutans*, *Sagina subulata*, *Scleranthus perennis*, *Potamogeton heterophyllus* are either extinct or were erroneously recorded. *Centaurea Calcitrapa*, *Eryngium campestre*, and *Myriophyllum alterniflorum* require recent confirmation. Of the 22 species known to occur *Hypochaeris maculata*, *Melampyrum cristatum*, *Urtica pilulifera*, *Aceras*, *Melica nutans*, *Sclerochloa distans*, *Tolypella intricata* are not on certain record for any other of the border counties.

Oxford has about 110 species not recorded for Northants.

REMARKABLE ABSENCES FROM OXON.

Ranunculus hirsutus.	Scrophularia Erharti.
" Lenormandi.	Orobancha major.
Cardamine impatiens.	Mentha rotundifolia.
Dentaria bulbifera.	Myosotis repens.
Barbarea arcuata.	M. sylvatica.
Diplotaxis tenuifolia.	Potam. heterophyllus.
Drosera rotundifolia.	P. obtusifolius.
Cerastium pumilum.	Actinocarpus.
Stellaria umbrosa.	Allium oleraceum.
Hypericum Elodes.	Narthecium.
Rhamnus Frangula.	Scirpus cæspitosus.
Genista anglica.	S. uniglumis.
Comarum.	Carex teretiuscula.
Myriophyll. alterniflor.	C. stricta.
Arctium nemorosum.	C. lævigata.
Hypochaeris glabra.	Calam. lanceolata.
Crepis biennis.	Agrostis Spica Venti.
Campanula latifolia.	Polypod. Dryopteris.
Wahlenbergia.	Equiset. sylvaticum.

Some of these will probably be discovered.

OXFORDSHIRE BOTANOLOGIA.

THE first notice of an Oxfordshire plant appears in *The Names of Herbes in Greke, Latin, Englishe, Duche, and Frenche* by William Turner published in 1548, where it is stated that '*Clinopodium* groweth plentifully about Bon by the Rehne and I heare say it groweth also about Oxford.'

Turner was born at Morpeth, Northumberland, about the end of the fifteenth century. From Cooper's *Athenæ Cantabrigienses*, vol. i., we learn that he was junior treasurer of Pembroke College in 1532, M.A. 1533, and senior treasurer 1538, Lord Wentworth paying the expense of his education. In the preface to his *Herball* he says he was fellow of Pembroke College from 1530 to 1538. 'Being yet a student of Pembroke Hall, whereas I could learn never one Greke, neither Latin nor English name even amongst the physicians, of any herb or tree; such was the ignorance at that time; and as yet there was no English Herbal but one full of unlearned Cacographies and falsely naming of herbes.' His first botanical work was a small tract of 20 pages, which contains the earliest printed records of any English plants. It was printed in 1538, and called *Libellus de Re Herbaria novus*. In 1540 having embraced Protestantism, and published and preached in support of it, he was obliged to leave Cambridge, was imprisoned and eventually exiled to Germany, where he again studied Botany. On the accession of Edward the Sixth, he returned to England, was made Prebend of York and Canon of Windsor. Having been appointed Physician to the Lord Protector Somerset, the University of Oxford gave him the D.M. degree. In 1548 appeared the *Names of Herbes* already alluded to. In 1550 he was made Dean of Wells. He was also a Member of the House of Commons. In 1551 he published the first part of *A new Herball*, dedicated to the Lord Protector. On the accession of Mary, Turner was deprived of his offices and again went into exile till 1558. Elizabeth restored his preferments to him.

The second part of his *Herball* in 1562 and the third part in 1566 were printed at Cologne.

These three parts were republished in one in 1568, and dedicated to Queen Elizabeth. In this *Herball* he mentions *Anemone Pulsatilla* and *Teucrium Scordium* as Oxfordshire plants. And also states *Datura* grows about Reading. The figures in the *Herball* are said to be the same as

those in the octavo edition of *Fuchius*. Of the 512 plates in that book Turner has used upwards of 400, adding about 90 new ones. In some instances the figures have been misapplied and in a few cases no description of the plate is given. Master Falconer is several times mentioned in the Herball. 'I can scarcely doubt,' says Petiver, 'that he was John Falconer who is recorded as having communicated many English plants to Amatus Lusitanus who taught Physic at Ferrara and Ancona. In treating of *Glauz*, of which Turner gives a new figure, he says he never saw it in England except in Master Falconer's book, and that he brought it from Italy.' This book was probably a *Hortus Siccus*¹. Falconer sent Turner the record of *Anemone Pulsatilla* from Oxfordshire. Turner died in 1568 and was buried in St. Olave's, Hart Street. From *Fasti Oxonienses* we learn that he married the daughter of a Cambridge alderman, by whom he had a son Peter, who was educated at Cambridge and incorporated at Oxford in 1599, where his son also named Peter was Professor of Geometry in 1649.

The next Oxford records are given in the *Herball or general historie of plants gathered by John Gerarde of London*, printed in 1597. Gerarde was born at Nantwich in 1545, he lived in Holborn within the suburbs of London, where he had a large Botanic Garden. His additions to the Oxfordshire Flora are *Scrophularia nodosa* from Stow Wood, *Leonurus cardiaca*, now extinct, and *Sagitta sagittifolia*, which he reports as growing 'in ditches neere the walls of Oxford.' Gerarde died in 1607.

In 1633 *Gerarde's Herball* was re-edited and almost rewritten by Thomas Johnson, who was born at Selby in Yorkshire, about the beginning of the seventeenth century. In 1629, when an apothecary in London, he published his first work *Iter Plantarum Investigationis ergo susceptum a decem sociis in Agrum Cantianum*, which is the first printed description of a botanical excursion in England². In 1633, as above stated, he published *The Herball*, in which, according to Pulteney, 800 new plants are added and 700 figures. Ray well designated the work as *Gerarde Emaculatus*. In 1643 the degree of D.M. was conferred on Johnson at Oxford. In the Parliamentary wars he became Lieutenant-Colonel to Sir Marmaduke Rawdon, and at the siege of Basing House received a shot in the shoulder, from which he shortly after died in 1644. 'He was no less eminent in the garrison for his valour and conduct as a soldier, than famous through the kingdom for his excellency as an herbalist and physician³.'

Habenaria viridis is said in *Johnson's Mercurius* to occur on the Barkway near Oxford, and two plants are included in his *Gerarde* which are additions to our Flora, *Stachys germanica* from near Witney, where it still occurs, and *Lythrum Hyssopifolia* from Dorchester, now lost. Neither of these were personally found by Johnson.

¹ Pulteney's Sketches.

² Trimen and Dyer's Flora of Middlesex.

³ Description of the Siege of Basing Castle, Oxford, 1644.

The next botanical writer to be noticed is John Parkinson, born in 1567. He was apothecary to James the First, and lived in London, where he had an interesting garden in Long Acre. In 1629 he published the *Paradisus terrestris*, which Pulteney says 'is at this time a valuable curiosity, as exhibiting the most complete view of the extent of an English garden at the beginning of the seventeenth century.' This is one of the earliest horticultural manuals. In 1640 appeared the *Theatrum Botanicum*, which, although of later date than *Johnson's Gerarde*, was probably written before it. It is a much more original work, involving great labour, and comprehends 'descriptions of all and figures of most of the plants that were known in his time,' *Richardson's Correspondence*, p. 350. He gives several records of Northamptonshire plants. These were probably of his own discovering, as also were his additions to the Oxford Flora, viz. *Pinguicula vulgaris* from Herrington [Headington], *Anagallis cærulea* from Botley, *Parnassia* from Headington and Botley, and *Asarum* from Eynsham Common. Parkinson was 73 years old when the *Theatrum* was published. He died about 1650.

In 1632 the Oxford Botanic Garden was founded by Henry, Earl of Danby, who gave for this purpose five acres of land, the site of the old burying ground of the Jews, and built greenhouses and stoves, and a house. He also endowed the establishment and placed it under the care of Jacob Bobart. In 1648 Bobart drew up a list of the plants cultivated under the title of *Catalogus plantarum Horti Medici Oxoniensis, Latino-Anglicus et Anglico-Latinus alphabetico ordine*. It enumerates 1600 species, 600 of which were British. In 1658 the catalogue was republished, Bobart's son Jacob, Dr. Stephens, and Mr. Wm. Browne assisting. In this enlarged edition the authors have, in every instance where it was possible, not only adopted the specific appellation given by Gerarde and Parkinson to each plant, but also quoted the page of their works. This is done for the first time in England. Not one indigenous plant is mentioned for the first time in the list.

Jacob Bobart was a native of Brunswick. There is a scarce print of him by Burghers in the Hope Collection, which represents him standing near the Danby Gate of the Botanical Gardens. He is holding a plant in his hand. Underneath is written:—

'Thou Germane Prince of Plants each yeare to thee
Thousands of subjects grant a subsidie.'

His beard, which on rejoicing days he used to wear tagged with silver, is depicted in the print as reaching to his waist. Edmund Gayton wrote a poem on him in 1662.

Bobart was buried at St. Peter's-in-the-East, Oxford, where a monument was placed on the wall on the outside near the south-west corner with the following inscription:—

To the Pious Memory of
 Jacob Bobart,
A native German,
A man of Great Integrity,
Chosen by the Founder to be keeper of the
Physic Garden.
He died Feb^r the 4th, 1679, in the 81st
Year of his Age.
As also of Mary his first wife, who died
April the 17th, 1655. And Anne his
second wife, who died Novemb. 21, 1696.
Together with four of their Children,
 Ann, Cordelia, Joseph, and Margaret.
And also Elizabeth,
Daughter of their son
 Tilleman Bobart.

In Rees' Cyclopaedia the name of the elder Bobart is by error given as Robert. The son Tilleman was employed in the Gardens; he found the Mint on Shotover which is figured in Sole's *Menthæ* and alluded to in the Flora, p. 239.

The Dr. Philip Stephens who assisted Bobart in drawing up the catalogue was born at Devizes. He entered St. Alban's Hall, was chosen fellow of New College, and eventually became Principal of Magdalen all. He died in London after the Restoration.

Mr. Browne, joint author of the catalogue, was a native of Oxford, became B.D. and Senior Fellow of Magdalen College. He died in 1678 and was buried in the outer chapel. He was the finder of the *Colchicum* recorded in Merrett; see p. 309 of the Flora.

In 1650 the first attempt at an English Flora was made by William How, who published anonymously the *Phytologia Britannica*. This, in contradistinction to all previous works, dealt entirely with British plants. *Verbascum*, probably *Blattaria*, a *Scrophularia*, either *lutea* or a form of *nodosa*, a variety of *Lychnis Flos cuculi*, white-flowered *Bartsia* and *Echium*; *Sium latifolium*, *Allium vineale*, and a form of *Crataegus* were given as Oxford plants.

The next writer to claim attention was a native of the county. William Cole or Coles, 'the most famous botanist of his time,' was born at Adderbury in Oxfordshire in 1626; and, after the usual elementary learning, he went to Merton College, where he completed his education. He settled at Putney, and published a work entitled *The Art of Simpling, or an intro-*

duction to the knowledge of gathering plants. Upon the restoration of Charles the Second he was appointed Secretary to Dr. Brian Duppa, Bishop of Winchester, but died in the year 1662, at the early age of 36¹. His principal work was *Adam in Eden, or Nature's Paradise*, published in 1657, which was an account in English of the uses and descriptions of plants, drawn up in clear and simple language. Many testimonials are prefixed to it. The writer of one says:—

'In yew there's poison, though there's none in you,'

and finishes his lay with—

'He say no more, your books themselves will prove,
And any garden yield you verdant bays,
And they that find the good, with all their souls
Will wish Newcastle may send all such Coles.'

The Botanical Garden is often alluded to by Wm. Coles, who acknowledges the assistance he has had from Mr. Steevens, Principal of Hart Hall, and Mr. Browne (joint author with Bobart of the garden catalogue), and other eminent botanists of the University. The districts visited by Coles are principally round Oxford and Adderbury, and altogether he gives localities for 31 species not previously recorded:—*Drosera* (now extinct), *Melilotus altissima*, *Astragalus glycyphyllos*, *Alchemilla vulgaris*, *Potentilla Tormentilla*, *Cotyledon* (from Merton College, where it is no longer found), *Sanicula*, *Bupleurum*, *Sambucus Ebulus*, *Galium verum*, *Inula Helentium*, *Campanula glomerata*, *C. Trachelium*, *Digitalis*, *Clinopodium vulgare*, *Myosotis palustris*, *M. arvensis*, *Lysimachia Nummularia*, *L. nemorum*, *Anagallis arvensis*, *Fagus*, *Juniperus*, *Habenaria bifolia*, *Ophrys apifera*, *Trichomanes*, *Polypodium vulgare*, *Ophioglossum*, *Chara vulgaris*, *Erythræa Centaurium*.

In 1656, Dr. Christopher Merrett published the *Pinax Rerum Naturalium Britannicarum*, based on How's *Phytologia*, but to which 200 plants are added. Merrett was born in 1614 and took his D.M. at Oxford in 1642. He was one of the earliest members of the Royal Society and formed a herbarium which is now preserved in the Sloane collection. In the 'Pinax,' *Lonicera*, *Silene puberula*, *Ananthe fistulosa*, *Trifolium pratense*, *Caucalis daucoides*, *Ceratophyllum*, *Centaurea Cyanus*, *Erigeron acre*, *Hottonia*, *Potamogeton* sp., *Orchis militaris*, *Neottia*, *Epipactis palustris*, *Colchicum*, *Carex pulicaris*, *C. echinata* (?), *Lolium*, *Ophrys aranifera*, *Symphytum*, and *Botrychium* are new to the Oxford list; but there is considerable difficulty in correctly identifying his record with modern names.

Dr. Robert Plot is the next writer in chronological order to refer to. He was born in 1641, at Sutton-Barn, Borden, Kent; and educated at Magdalen Hall, Oxford, took his M.A. in 1664, and in 1671 his LL.D.

¹ Rees' Cyclopaedia.

He then removed to University College. In 1677 he published his *Natural History of Oxfordshire* and in 1686 *The Natural History of Staffordshire*. Ray in his Synopsis gives him great approbation. Plot was the first Keeper of the Ashmolean Museum, in 1683. He was also Secretary to the Royal Society, and was appointed by the Vice-Chancellor Professor of Chemistry. He edited the transactions of the Royal Society from pages 143 to 166 inclusive, and held his Oxford appointments for seven years, leaving a large collection of curiosities to the Ashmolean Museum, which had been described in his county histories.

In 1687 he was made Secretary to the Court of Honour, and in 1688 received the title of Historiographer to James the Second. In 1694 he was nominated Mowbray Herald Extraordinary. He also published a register and history of the weather at Oxford in 1684. He left a quantity of MSS., including a large collection for the natural history of Kent. He died, at his house in Kent, in 1696, and was buried in Borden church, which contains a marble monument to his memory. There is a portrait of him in the Oxford Almanack for 1747¹.

Plot's Natural History of Oxfordshire is divided into ten Chapters. Chapter 1, 'The Heavens and Air,' which includes accounts of Floods and Storms; 'the Echoes,' one of which in Woodstock Park returned 17 syllables in the daytime, and 20 syllables at night. Chapter 2 is devoted to an account of 'The Waters,' describing the various rivers by which the county is drained. Plot dwells with great emphasis on the 'salubrious' situation of Oxford, and gives instances of extreme longevity. 'The Mineral Springs' are described and some curious hypotheses raised in accounting for their various peculiarities. Chapter 3 treats of the various kinds of 'Earth and Soils;' and Chapter 4 of 'Stones.' Chapter 5, on 'Formed Stones,' is an account of the fossils, many of which are figured. Some extremely shrewd suggestions are made by Plot in this chapter, which is very interesting as read by the light of the Geology of the present day. Chapter 6 on 'Plants.' Chapter 7 describes 'The Brutes,' which includes Birds, Beasts, and Fishes. Chapter 8 is on 'Men and Women;' Chapter 9 on the 'Arts;' and Chapter 10 on the 'Antiquities of the County.' It is the chapter on Plants which requires notice here.

Plot first begins by describing some new species, which he figures. These are *Viola hirta* and *palustris*, *Geranium dissectum*, *Potentilla procumbens*, *Sagina apetala*, *Monotropa*, and *Scirpus acicularis*. *Chenopodium rubrum* is described but not figured. The plates and descriptions are very good. Then follow *Vinca major*, *Trifolium arvense*, and *Enanthe fistulosa*. He confirms Ray's record for *Cephalanthera grandiflora*, and identifies it with Gerarde's *Helleborine flore albo*. Plot also differentiates two species of *Epipactis*—i.e. *latifolia* and *violacea*, which Ray had

¹ See also the Biography of Dr. Plot in the Second Edition of the *Natural History* by Dr. Lwyd. There is an oil painting of Dr. Plot in the Bodley Gallery and a very valuable engraving of him in the Hope Collection.

doubted if specifically distinct. Probably Ray was referring to *E. ovalis*. Plot says that *H. flore atro rubente* (*E. violacea*) has small narrow leaves somewhat like *palustris* but growing thicker on the stalk, whereas those of *latifolia montana* are broad and much thinner, the one also flowering a full month before the other; and he further notices that our '*latifolia*' has purple flowers as deep or deeper in colour than those of the *Helleborine flore atro rubente*.

The accidents or monstrosities of plants are next described, and then variegated specimens noted. An account is given of the white-berried Hawthorn at Bampton and the Glastonbury thorn at Rycote. The variety *stricta* of *Ulmus suberosa* is described, and then the various large and extraordinary trees are enumerated. Altogether Plot adds to our list 41 plants, of which 12 or 13 were described for the first time as British plants.

Robert Morison was born in 1630 at Aberdeen, and there received his education, which it was intended should fit him for the Church; but finding theology less to his taste than Physic he qualified himself for the latter profession. He was dangerously wounded in the shoulder at the battle of Brigg near Aberdeen, in which he fought for the Royal cause, and afterwards took refuge in Paris, where he applied himself to the study of anatomy, botany, and zoology. In 1648 he took the degree of M.D. at Angers. He was then appointed superintendent of the Duke of Orleans' garden at Blois, which he held till the death of the Duke in 1660. While holding this appointment he published a new edition of the *Hortus Bloisensis*. Being known to Charles the Second, he was invited by that monarch to England, and made King's Physician, Professor of Botany, and superintendent of the Royal Garden. In 1669 he made the acquaintance of the Dean of Christ Church, and other leading men of the University, and was by their interest made Professor of Botany. In 1670 he began lectures, but they were not given with regularity, his literary work interfering with his duties. As a specimen of the great work which he meditated under the name of *Historia Plantarum Universalis Oxoniensis*, Morison published in 1672 *Plantarum Umbelliferarum Distributio nova*, Oxon. fol. 1672. The *Umbelliferae* are here divided into 9 orders, the genera of which are distinguished by the seed. Of these 150 are illustrated. Not a single Oxford locality is quoted. This specimen work met with much approval, and Morison next brought out the *Historia Universalis* already alluded to. The first part was never printed; it exists in MSS. at Oxford¹. Morison divided all herbaceous plants into 15 classes.

The first five classes were published by Morison in 1680. The four succeeding classes were finished, and these with the remaining classes were completed and published, after an interval of 19 years, by Jacob Bobart, son of the first keeper of the Gardens, and joint author with his father of the Garden Catalogue already mentioned. Morison had the advantage of powerful patronage, being liberally encouraged by the University, and

¹ Trimen and Dyer's *Flora of Middlesex*.

was thus enabled to embellish his work with 3384 plates of plants, the figures being chiefly copied from other authors. The new plates are principally made by Bobart in the latter part of the work. The Mosses, Fuci, Corallines and Corals are, with the exception of a few woodcuts in Gerarde, the first of the kind engraved in England. Morison was killed, in 1683, by a hurt from the pole of a coach as he was crossing a street in London. There is a memoir of him in the *Historia Universalis*. He added but little to our knowledge of Oxford plants, very few localities being given in his volume of the *Historia*, and these were chiefly obtained from Bobart. Morison describes *Ononis campestris*, *Geranium lucidum* and *Lychnis diurna*, new to our Flora, and, on the authority of Mr. Bobart, *Samolus Valerandi*, *Geranium columbinum* and *G. rotundifolium*.

On the death of Morison, in 1683, Jacob Bobart, junior, succeeded to the botanical chair; he was born in 1640, and was employed by his father in the gardens. He was a good worker in local botany, and added many species to the Oxford Flora. He sent a considerable number of records to Ray, which were inserted in his *Historia* and *Stirpium*. Bobart prepared a *Hortus Siccus* in 20 volumes, which in 1885 was in existence in the Oxford collection. The Morisonian Herbarium, which is still preserved at Oxford was probably formed in great part by Bobart. In 1699, he published the third volume of Morison's history, in which are inserted Bobart's discoveries, the 'grasses' and 'sedges' contain many of these, and some of the figures are very characteristic. Sherard complains of his errors in the Mosses, see *Richard's Correspondence*, p. 134. Bobart's additions to our Flora are *Helleborus viridis*, *Myriophyllum alterniflorum*, *Heracleum Sphondylium* var. *Tordylium* (now extinct), *Galium tricornae*, *Mentha sativa* (?), *Stachys arvensis*, *Ajuga reptans*, *Ophrys muscifera*, *Orchis ustulata*, *Herminium*, *Ruscus*, *Carex dioica*, *C. ampullacea*, *C. vesicaria*, *Triticum caninum*, *Hordeum sylvaticum*, *Asplenium lanceolatum* (?), *Aspidium aculeatum*, *Polypodium calcareum*, *Chara hispida* (?), *Senecio campestris*, *Aira flexuosa*. He also contributed to Ray records of *Thlaspi perfoliatum*, *Tilia grandiflora*, *Leontodon*, *Phragmites*, *Bromus erectus*, which appear in the first edition of the *Stirpium*. *Vicia angustifolia* var. *Bobartii*, *Rubus leucocarpus*, *Pyrola*, *Polygonum lapathifolium*, *Brachypodium pinnatum*, etc. to the second edition. Altogether Bobart added at least 40 plants to the Oxford list, several being new to the British Flora. A fourth volume on Trees was in contemplation, but he died without carrying it into effect. Dr. Grey, in his edition of *Hudibras*, relates that he transformed a dead rat into the feigned figure of a dragon, by thrusting in taper, sharp sticks which distended the skin, till it resembled wings, and altered its head and tail; which so imposed on the learned, that several fine copies of verses were written on so rare a subject; and one of them sent an accurate (!) description of it to Dr. Malibrachi, librarian to the Duke of Tuscany. Bobart afterwards acknowledged the deception, but the animal was preserved for some time after in the

Anatomical Museum. At the age of 79 Bobart was forced by the Vice-Chancellor, Dr. Skippen, to resign the chair, and a few months after died. Consul Sherard writes in that year 'he was surprised to hear that he was compelled to resign,' and says, 'they ought to have allowed him to spend the short remainder of his days in the garden.' Bobart was buried in the churchyard of St. Peter's-in-the-East. His portrait appeared in the Oxford Almanack for 1719. Dr. Abel Evans in 1713 dedicated Vertumnus, a poetical epistle, to him: *Select Collection of Poems*, 1780, vol. iii. 145.

In the Philosophical transactions for 1683 is a paper by Bobart on the effects of the great frost, which happened in the preceding winter, on trees and other plants.

In Buddle's plants in the British Museum is the following letter by Bobart (kindly pointed out to me by Mr. Carruthers):

Oxon. April 4, 1707.

I am now to be thankful to God and my friends that I have not only seen, but had the perusal of as I think the best collection of its kind in the world, and is as instructive as admirable, if the intellectuall is the best part of mankind certainly whosoever contributes to that is the most amicable and performs the greatest part of humanitie. I return y^r Book of Mosses wth as many thanks as there leaves among the said Mosses to wth I have sometimes added a Plant and sometimes a note w^h I offer to y^r Maturer judgment to be ejected at pleasure if anything of my endeavour prove pertinent, I have my aime, you will Sr, easily find my imperfections and defects by this enclosed Bill, any of which if to be spared, would prove very acceptable to my small collection, and heartily give thanks that you have been pleas'd to open our eyes, that we may the better discover the wealth of oure owne country. I being now sensible that we have pass'd over diverse wthout sense of distinction. I hope you will safely receive y^r book sent by Mr. Bartlett to the Swan at Holborn bridge carriage paid, and if y^r candour will prompt you to excuse the Libertie I take of this inclosed note you will add obligations to S^r

Your most obliged servant,

J. BOBART.

In the Sloane collection of MSS. 1038 there is a Catalogus plantarum horti Oxoniensis earumque quæ pariter in pagis silvis pratis montosisque juxta Oxoniam locis nascuntur.

This is an alphabetical list of plants cultivated in the Botanical Garden with their English names, but without native localities or date. After a list of the garden plants is another, which may be the plants met with in the vicinity of Oxford such as *Cerinthe Honey Wort*, *Cauda Muris Mousetail*, *Filipendula Vulg.* *Water Dropwort*, *Filipendula Dropwort*, *Gramen tomentosum Cottongrass*, *Galium luteum*, *Ros solis*, etc. It evidently belonged to an apothecary, as at the end there is an interesting list of drugs with prices.

Edward Sandys, D.M. of Wadham, succeeded Bobart. Judging by

results the reasons which influenced Bobart's dismissers were rather social than scientific. Gilbert Trower of Merton succeeded Sandys.

It will be here necessary to go back to Jno. Ray, the great naturalist, whose writings commenced a new era in Botany. In 1670, before *Plot's History of Oxfordshire* was issued, Ray published his *Catalogus Plantarum Angliæ*, which at once superseded Merrett's incorrect *Pinax*. In this catalogue Ray gives *Ranunculus aquatilis* and *Cephalanthera grandiflora* as natives of Oxfordshire. In 1688 Ray issued his *Fasciculus Stirpium Britannicarum*, and in 1686-1688 his *Historia Plantarum*. In 1690 appeared the first edition of the *Synopsis Methodica Stirpium Brit.* The first systematic Flora of Great Britain. In this edition, besides the plants already quoted under Bobart, appear *Trigonella ornithopodioides* (with a plate) from Oxfordshire and *Salix* species. A second edition, much revised and improved, appeared in 1696, in which Sherard added *Vicia sylvatica* to the Oxford list; Bobart contributing those already mentioned. Ray does not appear to have personally visited Oxfordshire, but his writings indirectly did much to stir up enthusiasm in Oxford as elsewhere, Bobart's own work being probably to a great extent due to the example set by Ray. Linnæus termed this 'the golden age of Botany.' There are several prints of Ray in the Hope collection.

In none of the editions of Gibson's Camden are any additions made to our Flora; the discoveries of Parkinson, Plot, and Bobart being quoted in the list of rare plants of the county.

William Sherard, born in 1658, at Bushby in Leicestershire, is the next botanist to notice. He was educated at Merchant Taylors' School and St. John's College, of which society he became fellow in 1683. He travelled much on the continent as tutor of Lord Townsend; being chiefly occupied in collecting flowers, and did such excellent work as to secure the esteem and friendship of Ray. He then made several tours in England and the Channel Islands, finding many rare plants, which Ray inserted in the Synopsis. These included *Scirpus pungens*, *Gnaphalium luteo album*, *Asplenium lanceolatum* and *Bartsia viscosa* from Jersey; *Subularia* and *Cephalanthera* from Ireland, etc.

In 1703 he was appointed Consul at Smyrna, and there laboured diligently in making a large collection of plants, and also began the celebrated *Pinax*. After residing in Asia fifteen years, he returned to England, when the degree of Doctor of Laws was conferred on him by Oxford. Although he had made a large fortune in the East, he lived in the greatest privacy in London, devoting his time to the study of Natural History and the preparation of his *Pinax*, keeping up a correspondence with Tournefort, Boerhaave, Richardson, and other eminent naturalists. Seventy-five letters to the latter scientist are printed in the first volume of Nichols's *Literary Anecdotes*. He, however, indulged in occasional tours to Holland, France, and Italy. It is stated that whilst botanising on the rocks of the Alps he was nearly shot by a peasant, who

mistook him for a wolf. On one of his continental journeys he made the acquaintance of Dillenius, whom he afterwards induced to return with him to England. 'Dillenius (says Sherard in a letter dated Sept. 7, 1721, to Dr. Richardson) has brought with him most (if not all) of his *Fungi* painted, and all his *Lichenes*, *Lichenastra* and *Muscos*, neatly designed, with most of the plants he names for new in his catalogue.' In 1726 considerable alterations were made at the Botanical Gardens, on his promise to leave to it his collections. His herbarium presented to the University, rendered Oxford pre-eminent in the eyes of Europe for its Botanical treasures, 'which included original specimens from most of the eminent botanists of the time, named by themselves, and accompanied by their remark or by queries,' says Sir James Smith, 'scarcely less instructive.' On his death, which took place in 1728, he bequeathed £3000 to provide a salary for the Professor of Botany, on condition that the University should supply £150 towards the maintenance of the garden, and that Dillenius should be the first Sherardian Professor. Although Sherard never published any works under his own name, almost all contemporary botanists bear testimony to his merit; see, for example, Bobart's preface to the third volume of Morison, and Ray in the third volume of the *Historia Plantarum*. The third edition of the *Synopsis* was prepared under Sherard's inspection, and he probably wrote the *Schola Botanica*, published at Amsterdam in 1689. The preface of the latter work, dated London, 1688, is signed S. W. A., and suggests that it could only have been prepared by Sherard. In 1727 he assisted Boerhaave in revising the MSS. of the *Botanicon Parisiense*. For an extended notice of William Sherard see the interesting memoir by B. Daydon Jackson in Journ. Bot., May 1874. His herbarium of British plants is at this date preserved by itself at Oxford; but it has been considerably tampered with, many specimens collected as recently as 1820 being inserted without collector's name: and many plants removed to the other collections. There are but few traces of Sherard's work in the Oxfordshire Flora, but many specimens in the Dillenian herbarium were collected by him. He recorded *Vicia sylvatica* from Merley Wood, near Oxford, and *Salix caprea acuto longoque folio*, which Sir James Smith refers to *acuminata* and Sibthorp confounds with *cinerea*. In the Dillenian herbarium a form of *Caprea* represents it, and probably *S. Smithiana* was the plant referred to by Sherard. *Stellaria palustris* was another of his discoveries 'about Oxford.' He died 11th Aug., 1728, and was buried at Eltham, where he rests in a nameless grave. Dillenius named a genus of plants *Sherardia* in honour of Sherard, and the name is still retained. There is no portrait of Sherard in the Hope collection.

John Jacob Dillenius, the first Sherardian Professor, was born at Darmstadt, in 1687. He was educated at the University of Giessen, where he published a list of plants growing in that neighbourhood; a work which established his reputation as a botanist, although arranged

in an awkward manner, namely, by the times of flowering of the plants. It contains a list of plants, gathered within a circuit of about a mile and a-half German. In this small space, he found 980 species of Phanerogams, 200 species of Mosses, of which 140 were new, and 160 *Fungi*, 90 being previously undescribed. It was his great knowledge of Cryptogamic Botany which induced Sherard to bring him to England. He resided with Sherard in London, and there undertook the task of editing a new edition of *Ray's Synopsis*, the second edition of which, published in 1696, had become scarce. The third edition was published in 1724, but Dillenius' name did not appear as the writer, it being considered that his foreign name would act prejudicially upon its sale. The new matter added by Dillenius is distinguished from the rest of the book, and besides his own discoveries, much assistance was rendered by Dr. Sherard and Richardson, Llwyd (the successor of Plot at the Ashmolean Museum) also furnishing a large number of records from Wales. In this edition 40 new *Fungi*, 40 *Algæ*, over 150 *Musci*, and about 220 Ferns, and Phanerogams are added; the whole number of species described amounting to about 2200; these, judged by the Linnean Standard of species, would number about 1800. Although there are many mistakes in Synonymy, still the book was a decided advance upon previous editions, and it remained the text-book of British Botany till the appearance of *Hudson's Flora Anglica*. One peculiar error will be found under *Anemone nemorosa*. The additions to the Oxfordshire Flora in this edition are not numerous, Dillenius having been at that time but little in the country. They are as follows:—*Stellaria palustris*, on the authority of William Sherard, *Linaria repens*, recorded by James Sherard and William Dandridge, a rayed variety of *Centaurea nigra* and *Enanthe fluviatilis*.

On the death of William Sherard, Dillenius was appointed Professor of Botany at Oxford, and thus at last reached 'the completion of his hopes, and the field of all that gratification for which his tastes and pursuits, prompted him to wish, and qualified him to enjoy. Add to this that he was placed in the society of the learned, in the completest sense of the word, and at the fountain of every information which the stores of ancient and modern erudition could display to an inquisitive mind.'

In 1726 he accompanied Brewer for a two months' tour through the west of England to Wales. An account of this journey is given in a letter to Dr. Richardson, No. 100 of *The Richardson Correspondence*. They first went to the Mendips, and Cheddar, gathering *Meconopsis cambrica*, *Saxifraga hypnoides*, etc. On 'Brent Downs' (Brean Down) they found the *Helianthemum polifolium*, and an unknown grass *Spiza sparti, foliis reflexis angustis glaucis striatis, radice crassa et fungosa*, which is a peculiar form of *Festuca*, probably *trachyphylla* Hack. They discovered also *Silene maritima* and *Trinia*. They then travelled west through Gloucestershire, Worcestershire, and Salop, gathering *Campanula patula* at Elberry Hill wood (Abberley¹) near Worcester and *Juncus*

lampocarpus in the adjacent meadows. In Shropshire Dr. Littleton Brown joined them. Along the Severn they noticed *Brassica sylvestris*, and *Sinapis nigra* and the cut-leaved form of *Heracleum*. From Dolgelley they ascended Cader Idris 'and found a great many of the Welsh plants there.' These included *Epilobium alpinum*—*Chamenerium alpinum minus prunella foliis prope Dolgelley ubi ascendit Cader Idris primum, dein in Glydyr reper.* This has not since been recorded from Wales, but specimens are in the Dillenian herbarium. They found too the Alpine form of *Campanula rotundifolia* and many mosses and lichens. Between Carnarvon and 'Dolgelle' they gathered *Vicia Orobus*, which is still preserved in his herbarium. *Littorella* was found in the river near Llanberis, and also *Isoetes*. Anglesea was next visited, but Dillenius did not speak highly of its richness in rare plants. They gathered *Mertensia maritima*, *Asplenium marinum* and *Gentiana Pneumonanthe*. In 'a small river that runs out of a pond near Esquire Baly's' Dillenius found *Potamogeton foliis oblongis, planis, infernè alternis, supernè constipatis*. This plant is preserved in his herbarium and proves to be *Potamogeton nitens*, the Dillenian specimen having been found more than a century before it was described as a British plant.

Near Newborough in Anglesea they gathered *Thalictrum maritimum*, *Ononis repens* (*Ononis maritima procumbens*), and *Vulneraria flore coccineo*, now known as *Anthyllis Dillenii*. *Euphorbia Portlandica* and *Viola Curtisii* were also found. *Cakile maritima* and *Brassica monensis* were discovered at Abermeney Ferry. They then went to Snowdon, finding at its base *Wahlenbergia* and in the lake at the foot of Gribgoch *Potamogeton, lapathi minoris foliis pellucidis*, suggested by Dawson Turner to be *heterophyllus*; it is, however, a form of *P. polygonifolius*. They missed the *Woodsia*, and *Lloydia*. In Llyn y Cwm *Subularia* was gathered, and on the hill *Lycopodium annotinum*.

Other plants gathered in Wales on this tour were *Juniperus nanus*, *Alsine verna*, *Alisma ranunculoides*, var. *subrepens*, *Salix herbacea*, *Carex pallescens*, *Hypericum quadrangulum*, *Anagallis tenella*, *Nitella opaca*, etc. In 1732 Dillenius published the *Hortus Elthamensis* in two folio volumes with 324 plates, drawn and engraved by himself (as were those in his other books), and descriptions of about 400 rare plants, which were cultivated in Dr. James Sherard's garden at Eltham. This work did not sell, and a portion of it was cut up to hold his *Hortus siccus*. He appears to have disliked preparing it, as he considered it was only done to bring James Sherard into notice. Dillenius says that James Sherard made 'him lose more than £200 over its publication, besides much valuable time,' and complains that after Consul Sherard's death 'he took me off and set me to work in his garden, to make himself known, and promised to do great things, viz. to pay for the plates, paper, etc., but when it came to the performance he did nothing; and, not to lose so many years' labour, I undertook it at my own expense. All his kindness

ended in an offer to lend me money, and to take thirty books (which he did to hinder my taking subscriptions). I finished the book without his money, and he instead of thirty, took only ten books, for which I had but 30 guineas—I gave him besides, one more gratis, and some time after, another, which in some manner he begged of me. . . . If the time which hath been spent in composing this work, had been employ'd in the *Pinax* I durst say the *Pinax* was finished.' *Rich. Corres.* p. 364. In the *Hortus Dillenius* records *Tussilago hybrida* from Oxfordshire '*prope Banbury primum inventa dicitur in Anglia*,' p. 310.

In 1735 he was made Doctor of Physic. 'Linnæus visited Oxford in 1736 in order to see the Physic Garden, and was received in a friendly manner by Dr. Shaw who declared himself a disciple, having read Linnæus' *System* with great pleasure. The learned Dillenius was at first haughty, conceiving Linnæus' *Genera* to be written against him, but he afterwards detained him a month without leaving Linnæus an hour to himself the whole day long; and at last took leave of him with tears in his eyes, after having given him the choice of living with him till his death, as the salary of the Professorship was sufficient for them both¹.'

Another version of the meeting of the two Botanists relates that Linnæus, meeting the Oxford Professor with Dr. Shaw, apologised for his inability to talk in English, which threw Dillenius off his guard, who remarked carelessly to Dr. Shaw 'this is the young man who would confound the whole of Botany;' but Linnæus gathered the meaning of the speech by tracing the verb 'confound' to its Latin root, and soon took an opportunity of retaliating by slightly alluding to it, while he was demonstrating in the garden some of the new genera to which Dillenius had particularly objected. He quickly constrained the Professor to form a high opinion of his ability, although he could not succeed in making him a proselyte. In a letter to Dr. Richardson in August of that year Dillenius writes: 'A new botanist is arose in the north, a founder of a new method *a staminibus et pistillis* whose name is Linnæus. . . . He is a Swede and hath travelled over Lapponia; hath a thorough insight into botany; but am afraid his method won't hold. He came hither and stayed here about eight days.' Their meeting led to a friendship and correspondence which terminated only with death. Linnæus thus expressed himself '*In Anglia nullus est qui genera curat vel intelligat præter quam Dillenius*.' Sir James Smith says that had Dillenius' generosity been equalled by Sir Hans Sloane it is probable that Linnæus would have remained in England.

Dr. Williams, Professor of Botany at Oxford, gave Professor Schultes another version of the story. He says Linnæus guessed that Dillenius had used the word 'confusion,' but that shortly afterwards Sherard (? Shaw) and Dillenius stopped by a wall overgrown with *Linaria Cymbalaria*, a plant upon which they were desirous of having Linnæus'

¹ Linnæus' diary, 517.

opinion, as much doubt had existed respecting it. Linnæus removed these difficulties with his natural perspicuity. A second and third plant of which they felt uncertain were also made clear by Linnæus with perfect ease. Dillenius was surprised, and his companion remarked 'he could see no confusion in Linnæus.' Then grew up a mutual liking, and it was not till Linnæus was about to leave Oxford that he remarked to Dillenius he hoped he had brought no confusion there, when the Professor took the opportunity of apologizing for the ungracious word.

In 1741 Dillenius published his *Historia Muscorum* at a guinea per copy, 250 copies being printed. It is a quarto volume of 576 pages, containing the synonyms, history, and descriptions of above 600 mosses; with 85 plates etched by Dillenius himself. In spite of subsequent improvements the book is never likely to become less valuable, as there were only a limited number printed. Sir James Smith states that he saw some copies 'fairly lettered and untouched on the shelves of collectors as *A History of the Muscovites*.'

Lycopodium clavatum is first made known as an Oxford plant in this work. The type specimens of his Mosses are still preserved in the Oxford Herbarium, and also many of the plants which he described in the Synopsis; to these he added specimens which he collected during his residence at Oxford, many of these being additions to our Flora. They include *Equisetum palustre* 1744, *Bellis perennis* 1721, *Oenanthe silaifolia*, *Galium palustre*, *Asperula cynanchica*, *Thymus serpyllum*, *Salvia pratensis* 1730, *Plantago major* var. *intermedia*, *P. Coronopus* 1745, *Hippocrepis comosa*, *Orchis Simia*, *Sclerochloa rigida*, *Scirpus palustris*, *Rosa mollis*, *Gentiana campestris*, *Potamogeton polygonifolius*, *Cardamine flexuosa*; and from Berkshire *Hypericum quadrangulum*, *Galium saxatile*, *G. uliginosum*, *Veronica officinalis*, and *Gymnadenia Conopsea*.

In the Garden Library is a copy of the Dillenian Ray with the plates coloured by Dillenius himself, and in the Bodleian Library one of the *Hortus Elthamensis* also coloured by him. About 250 unpublished coloured drawings of *Fungi* by Dillenius, very neatly executed, are also in the Garden Collection; these, with his books, MSS., and specimens, were bought by Dr. Humphrey Sibthorp from Dillenius' executors, after his death, which took place in 1747 from an apopleptic fit, at the age of 60. There is a portrait of him in the Bodleian Library from which a print was published in the Annals of Botany.

James Sherard, brother of the Consul and owner of the Eltham Garden, occasionally visited Oxfordshire, *Linaria repens* being discovered by him at Henley. His treatment of Dillenius has already been noticed.

Dr. Humphrey Sibthorp succeeded Dillenius, as Sherardian Professor, he is said to have given one not very successful lecture, and as Sir James Smith says every scientific object slept during the 40 years he held the post. The genus *Sibthorpia* was dedicated to him by Linnæus and not, as is frequently supposed, to his illustrious son.

In the rather barren time which followed, the only botanist to add to the Oxford Flora was Blackstone, of whom very little is known. He lived in London, having been apprenticed to an Apothecary, and visited Oxfordshire about 1736, probably staying at Walcote near Charlbury. Here he made many interesting discoveries the MS. list of which is preserved in *Herb. Sloane*, vol. 317. These the Rev. W. Newbould has kindly transcribed for me. The additions made by Blackstone are *Veronica montana*, *Salix pentandra*, *Valeriana officinalis*, *Iris fatidissima*, *Carex remota*, *C. pallescens*, *C. flava*, *C. vulgaris*, *Aira præcox*, *Melica uniflora*, *Lithospermum officinale*, *Sanguisorba officinalis*, *Atropa*, *Viburnum Lantana*, *Allium ursinum*, *Stellaria Holostea*, *Nepeta Cataria*, *Pedicularis palustris*, *Anthyllis Vulneraria*, *Moenchia*, *Alchemilla arvensis*, *Specularia hybrida*, *Rhamnus catharticus*. In 1746 he published his *Specimen Botanicum* which consists of the original localities in various counties of over 360 species of plants. Besides the addition to our county already quoted, this book gives Oxfordshire localities for the first time of the following plants—*Aquilegia*, *Arabis hirsuta*, *Thlaspi arvense*, *Alopecurus tenuifolia*, *Sagina nodosa*, *Lathyrus Aphaca*, *Spiræa Filipendula*, *Cirsium eriophorum*, *C. acaule*, *Nepeta Glechoma* var., and *Avena pubescens*. Specimens of *Anemone Pulsatilla* collected by Blackstone are contained in the Dillenian Herbarium. His own herbarium is now in the British Museum. Blackstone died in 1753. There are two letters of his published in the *Richardson correspondence*, one giving an account of the first discovery of *Dentaria bulbifera* as a British plant. The genus *Blackstonia* was named after him by Hudson and might well be revived. There is a print in the Hope Collection of three Botanists, one of whom is Wm. Curtis, author of *Flora Lond.*, the second being Blackstone and said to be a good likeness of him. It is the only portrait of him in existence.

John Lightfoot, born in 1735, was educated at Oxford, where he took his M.A. degree and entered Holy Orders, becoming chaplain to the Dowager Duchess of Portland. He was recommended to this 'intelligent admirer and patron of Natural History in General' by his taste for Botany, and Conchology, as well as by his courtly manners. By her grace's influence he obtained the Rectory of Gotham, in Notts, and subsequently the living of Cowley, in Middlesex. In 1772 Mr. Pennant invited Lightfoot to accompany him on his second tour through Scotland and the Hebrides, advising him to make a compilation of a *Flora Scotica*, and offering to defray the expenses of publishing. This kind offer was accepted by Lightfoot. He received great help from Scotch Botanists, who placed their knowledge of localities, and their herbaria at his disposal. Sir Joseph Banks and Dr. Solander assisted him in identifying the plants collected. Oxford was visited by him in order to compare his Mosses, etc., with the type specimens of Dillenius. The *Flora Scotica* was published in 1777. For some years Lightfoot was a Fellow of the Royal Society, and was one of the original members of the Linnean Society. He died at

Uxbridge in 1788. His very excellent Herbarium was purchased by George the Third for 100 guineas, and given by the King to Queen Charlotte. It was kept at Frogmore, where Sir James Smith had the privilege of consulting it in the preparation of his *Flora Britannica*, as also had Dr. Goodenough for his monograph on the *Carices*.

When Dr. Lightfoot was working at Oxford, he made several excursions into the neighbourhood, and on some of these he was accompanied by Mr. Yalden. Some of the rare or interesting plants noticed he recorded in a copy of the *Dillenian Ray*, and in a copy of the *Flora Anglica* in the Botanic Library.

The plants not previously recorded for the county included—*Sisymbrium Irio*, *Astragalus danicus*, *Teucrium Chamaedrys*, this being probably the first British record, *Gagea lutea*, *Schoenus nigricans*, *Fritillaria Meleagris*, *Epilobium angustifolium*, *Asperula cynanchica*, *Calamagrostis Epigeios*, *Thesium linophyllum*, *Crepis fetida*, and *Lathrea*.

It is not a little singular that the Fritillary, so conspicuous a plant of the Oxford meadows, should have so long remained unnoticed by the various botanists who had resided in or visited Oxfordshire.

Up to this time about 230 species had been recorded as Oxfordshire plants. We now enter upon a new era. Linnæus, whose visit to Oxford has been already noticed, published in 1735 the *Systema Naturæ*, in 1737 his *Genera Plantarum*, and in 1753 the *Species Plantarum*. These works soon caused the views of Linnæus to make way in England, and in 1762 Hudson published the *Flora Anglica* based on the Linnæan system. Hudson's book quickly superseded the work of Ray, and, as Sir James Smith says, 'marks the establishment of the Linnæan principles of Botany in England.' It added nothing to our county.

Sir Joseph Banks was born on the 13th Feb., 1743, at Argyle Street, London, and was educated at Harrow and Eton. At Eton he acquired a taste for Natural History, all his spare time being spent in the woods and fields round the school. He entered Christ Church, as a gentleman commoner, and continued collecting specimens of the plants round the city. He is said to have been the first to notice *Senecio squalidus* on the walls of Oxford, and in his Herbarium at the British Museum many Oxfordshire plants are still preserved. His additions to the Oxford Flora include *Raphanistrum innocuum*, *Ranunculus peltatus*, *Oxalis Acetosella*, *Callitriche autumnalis* (?) [*hamulata*], *Glyceria fluitans*, *Reseda lutea*, *Lathyrus sylvestris*, *Trifolium filiforme*, *Hippuris*, *Helosciadium inundatum*, *Phleum pratense*, *Scirpus lacustris*, *Juncus supinus*, *J. squarrosus*, *Daphne Laureola*, *Lactuca virosa*, *Limosella*, *Solidago Virgo Aurea*, etc. It was owing to Sir Joseph Banks' exertion that the first Natural Science Lectureship at Oxford was instituted. There are several prints of him in the Hope Collection.

John Sibthorp, the youngest son of Dr. Humphrey Sibthorp, already spoken of, was born at Oxford in 1758, and educated at Magdalen School

and Lincoln College. He obtained the Radcliffe Travelling Fellowship and became a member of University College. He took the degree of M.A. in 1780 and M.B. in 1783. The following details are from a memoir of him by his friend Sir J. E. Smith. He was intended for the medical profession, and entered at Edinburgh to complete that branch of his education, but he took the M.D. at Oxford in 1784. The taste he had early imbibed for natural history, especially botany, was cultivated at Edinburgh, whence he made a tour into the Scotch Highlands. After his return he visited France and Switzerland, staying a considerable time at Montpellier, where he made the acquaintance of Broussonet, collected many plants of the district and communicated the result of his discoveries to the Académie des Sciences of Montpellier. His father succeeding to an estate, necessitated his return to England in 1783, when on his father's resignation he was appointed to the Sherardian Chair. He himself did not need the emolument, having already an ample independence of his own in prospect from the estate of his mother, who was his father's second wife. These expectations and his appointment released him from any need to practise as a Physician, and his attachment to Botany increased. There was a friendly competition between him and Sir James Smith for the possession of the Linnæan Museum and Library, which the latter succeeded in obtaining, but Oxford only narrowly missed the acquisition of so important and valuable a collection.

Dr. Sibthorp in 1784 passed some time at Gottingen, where he first projected his tour to Greece. He first visited the principal seats of learning in Germany, and stayed some time at Vienna, where he cultivated the friendship of the two professors Jacquin, studied the celebrated MSS. of Dioscorides, and procured a most excellent draughtsman, Ferdinand Bauer, to accompany him on his expedition. In March 1786 they started from Vienna, passed through Carniola to Trieste, Venice, Bologna, Florence, Rome, and Naples, sailed from thence in May, touching at Messina, and the Isle of Milo, and then proceeded to Crete. Here in June the flowers were in great beauty. In returning to Milo, they narrowly escaped shipwreck. They then touched at several islands of the Archipelago, visited Athens, and remained for a while at Smyrna. Hence, following the steps of Sherard, they proceeded to Bursa, climbed the Bithynian Olympus, and at length reached Constantinople, where they spent the ensuing winter. In a botanical excursion to Belgrade on Feb. 17, 1787, and another to Bujuckderi, March 5, the plants found in flower were almost entirely the same as are met with at the same season in England. In March they joined company with Captain Emery, and sailed from Constantinople for Cyprus, taking the islands of Scio, Mytilene, Cos, and Rhodes, and touching at the coast of Asia Minor on their way. A stay of five weeks at Cyprus enabled Dr. Sibthorp to draw up a *Flora* and *Fauna* of that island. The former comprehended 616 species of plants, the latter 18 mammals, 85 birds, 19 amphibians, and 100 fishes. The particular stations, domestic

and medicinal uses, and the vernacular names, when known, are sub-joined. The same method is pursued in a subsequent part of the journal with regard to the plants and animals of Greece, and everything that could be recorded relative to the medicine, agriculture, and domestic economy of that country and the neighbouring isles. The illustration of the writings of Dioscorides in particular was Dr. Sibthorp's chief object.

The first sketch of the *Flora Græca* comprises about 850 plants. 'This,' says the author, 'may be considered as containing only the plants observed by me in the environs of Athens, on the snowy heights of the Grecian alp Parnassus, on the steep precipice of Delphis, the empurpled mountain of Hymettus, the Pentele, the lower hills about the Piræus, the olive grounds about Athens and the sterile plains of Bœotia.' Having continued his journey through Greece, and its various islands, he reached Athens in June 1787. From thence he prosecuted other journeys, ascending Mount Delphis in a storm of wind and rain. The scenery of Mount Athos made a great impression on him. He then visited Thessalonica, Corinth, and Patras, returning to England at the end of the year. His health, never very robust, had suffered materially, from the privations he had undergone, but his native air gradually recruited his strength. During his stay in England, Bauer was engaged in making his drawings of the animals and plants collected in their recent travels. Dr. Sibthorp for his merits, had an increased stipend granted him, with the title of Regius Professor. In the spring of 1788 he entertained Sir Joseph Banks, Mr. Dryander, and Sir James Smith, for a week, and they found that Sibthorp was not satisfied with the result of his labours. Accordingly in 1794 Dr. Sibthorp set out on his second tour to Greece, his health suffering much on the journey to Constantinople. In company with Mr. Hawkins he made an excursion into Bithynia, and climbed to the summit of Olympus. In September they passed down the Hellespont, spent two days in examining the plains of Troy, and then proceeded to Imbros, and Lemnos. They then passed ten days in investigating the district round Mount Athos. Their journey next led them to Skiatho, hence to Negropont and by the Piræus to Athens. In November they proceeded to Patros and Zante. In February they visited the Morea, making in two months a complete circuit of the peninsula. The Violet and Primrose welcomed them in the plains of Arcadia, and *Narcissus Tazetta*, which Dr. Sibthorp was disposed to think was the true poetic Narcissus, decorated in profusion the banks of the Alphæus. Proceeding to Argos and thence to Mycenæ they returned from Hermione by land to Argos. April and May were spent in visiting Cardamoula, Calamata, Cephalonia, and Preversa. The weather had been very unfavourable and Dr. Sibthorp caught a severe cold from which he never recovered, a miserable journey to England occupying till the autumn of 1795. The climates of Devonshire and Bath were tried in vain, and he died of consumption at Bath in February, 1796, at the early age of thirty-eight. 'No name has a fairer claim to

botanical immortality among the martyrs of the science, than that of Sibthorp.'

He left by his will an estate in Oxfordshire to the University for the purpose of publishing his *Flora Græca* in 10 folio volumes, 100 coloured plates in each, and a *Prodromus* of the same work, in 8vo. without plates. This was carried out by Sir J. E. Smith, who drew up the botanical descriptions and characters; Sibthorp having only drawn out the plan of the *Prodromus* and the figures of the Flora. After the expenses of this work had been defrayed, the estate was to endow a professorship of rural economy, which under certain conditions was to be held by the Sherardian Professor, who was obliged to read lectures in each term.

It was supposed that Sibthorp's collections, correspondence, etc., were also left to the University. Prof. Daubeney says, in a letter to Mr. Dawson Turner, that when the house belonging to the Professor of Botany was pulled down by the street commissioners, *various papers* (for which there could not have been room in the only apartments that then remained attached to the Garden) were removed to Dr. Sibthorp's private dwelling-house, which, on the death of the son, and afterwards of the father, fell into the hands of Lady Sewell, sister of the author of *Flora Græca*. On the decease of that lady the effects were sold, and amongst them the various papers, etc. At the sale the Professor of Botany, Dr. Williams, bought several volumes which he had reason to believe belonged to the University, and restored them to the Garden. The various papers above alluded to were Dr. Sibthorp's correspondence and with them much of the correspondence of the older Botanists of the University; at the auction they were purchased by a druggist for waste paper, and after keeping sufficient for his use there remained enough to make it worth while to send them to a neighbouring paper-mill. Thus perished a correspondence which rivalled in value and interest that of Smith or Richardson. Dr. Williams was not aware this correspondence was put up for auction. He had previously made application to the Sibthorp family for its restitution to the University.

The only work which Sibthorp lived to complete was the *Flora Oxoniensis* dedicated to Sir Joseph Banks. It is the first general Flora of the county, and is especially interesting as it appears to be solely the result of Sibthorp's researches, supplying as he does the various localities contained in it. The Flora is arranged according to the Linnæan system, with the Linnæan names, the synonyms of Ray, etc., being also quoted. About 750 species are included as constituents of the county list; several of these, however, having very slight claim to admission, namely *Phleum paniculatum* (*asperum*), *Arabis Turrita*, and *Myrrhis odorata*. Sibthorp omits Plot's *Viola palustris* and Ray's *Trigonella ornithopodioides*, and also *Verbascum Blattaria*, *Scrophularia vernalis*, and *Asarum europæum*. The three last, if ever found, were not native. The plant previously

referred to *Pyrola rotundifolia* is correctly identified by Sibthorp with *P. minor*. Blackstone's *Salix pentandra* is also absent. Ray's *Salix acuminata* is here wrongly referred to *cinerea*; *Herminium Monorchis*, although recently found by Dr. Lightfoot, is omitted, and no notice is taken of Plot's variety of *Epipactis latifolia*. The *Asplenium* from Adderbury (either erroneously described as *lanceolatum* by Bobart, or an alien there) is not given.

About 530 species are additions to the county Flora, which with varieties and plants previously recorded was now shown to contain about 780 species and varieties.

In this Flora, Sibthorp first describes as British plants *Ranunculus circinatus*, *R. fluitans*, *R. heterophyllus*, *Erodium cærophyllum*, *Arabis Turrita*. He also described under names which are still retained *Juncus glaucus*, *Lychnis vespertina*, *L. diurna*, *Potentilla procumbens*, *Trifolium dubium*.

In addition to the Phanerogams, 87 species of *Musci* are described, as well as 20 species of *Hepaticæ*, and over 340 *Lichenes*, *Algæ*, and *Fungi*.

In the Preface Dr. Sibthorp mentions the chief rarities of the county, pointing out the *Monotropa*, *Pyrola*, *Cephalanthera* of the chalk woods, the *Lycopodium* and *Oreopteris* on Shotover, and the *Pinguicula* and *Parnassia* on Bullingdon Green. He alludes to the Orchids on the chalk downs and to the presence there of *Onobrychis* and *Iberis*, with the parasitic *Orobanchæ*. The Burford Downs are stated to yield *Ophrys*, *Senecio campestris*, *Anemone Pulsatilla*, and *Astragalus danicus*; while the rivers about Oxford have both water-lilies, the arrowhead and flowering rush. As plants not indigenous mention is made of *Hieracium cernithoides* (probably *H. amplexicaule*), *Senecio species* (*S. squalidus*), and *Linaria Cymbalaria*.

Such a work as this, so accurate and thorough, the result of personal toil and observation, placed Oxfordshire for a long time at the head of counties with published floras. The best proof of its excellence will be seen, when the additions made during the next fifty years are noticed.

Sibthorp had a country house near South Leigh, which will explain the frequent references to that portion of the county. His descendants have been munificent donors to the church there. It must be borne in mind, that since his time, field enclosure has taken place, most of the commons have become absorbed, and the great limestone tract of the west brought under cultivation. Hence many of the plants he mentions have become rare and some extinct. Of his herbarium of British plants I am unable to find a trace, and whether it went in the 'heap of waste paper' to the local paper-mills or whether its fate was to perish at the hands of some energetic 'cleaner out,' is an open question. Some portion evidently remained to comparatively recent times, for Mr. Newbould was shown a small bundle by Mr. William Baxter, in whose careful hands it was not likely to suffer. There may be a few of the Sedges in Dr. Goodenough's

Herbarium. Fortunately most of his records have been since confirmed; *Bromus madritensis* and *Carex strigosa* being the most notable exceptions. Dr. Sheffield, who is described as one of the best botanists at Oxford, a friend and contemporary of Sir Joseph Banks, Dr. Lightfoot, and Dr. Sibthorp, found *Carex strigosa* in Witham Wood.

Sibthorp was buried in the Abbey Church at Bath, where there is a monument to his memory.

There is no portrait of Sibthorp in the Hope Collection.

James Benwell, born about 1735, was employed for many years as a workman in the Botanic Gardens; he was an ardent lover of Botany, and although uneducated was an intelligent observer, and possessed an intimate acquaintance with the plants of the neighbourhood. He attended Dr. Sibthorp on his excursions when collecting material for the Flora Oxon., and was the first to discover *Paris quadrifolia* and a few other rare plants in the county. 'His integrity, industry, and a natural propriety and courtesy of manners gained him the respect and esteem of all who knew him.' He died in 1819, aged 84 years. A print of him was published a few years before his death from a drawing by Mr. A. R. Burt, and a copy is contained in the Hope Collection.

Dr. Goodenough made the next addition to our list by recording in Smith's *English Flora* the occurrence of *Erodium moschatum*. In the same book Mr. Bichenov was credited with the discovery of *Tilia ulmifolia* (*T. parvifolia*) and *Rubus rhamnifolius*. Sir James Smith quoted Oxfordshire for *Campanula rapunculoides* on faith of a note in Buddle's *Herbarium* which no subsequent record confirms, for *Lonicera Caprifolium* found by Mr. Butt and thought by the finder to be indigenous, for *Daphne Mezereum* found by Mr. J. Wheeler, and for *Eriophorum vaginatum* (now extinct) and *Salix Lambertiana*.

In Purton's *Midland Flora*, 1817-1821, Dr. Williams, Professor of Botany, is stated to have found *Tulipa sylvestris*, Baxter is quoted for *Bromus racemosus* and *Nephrodium dilatatum* and the Rev. W. T. Bree identifies Sibthorp's *Hieracium cerinthoides* with *H. amplexicaule*, and records for the first time as an Oxford plant the beautiful *Leucojum aestivum*.

William Baxter, Curator of the Oxford Botanic Garden, was born at Rugby on Jan. 15th, 1787. He was appointed to the Oxford Botanic Garden in 1813. In 1817 he was admitted as an associate of the Linnæan Society. 'At this time Botany had sunk at Oxford to its lowest level. Sherard, Dillenius, and Sibthorp belonged to the past. Dr. Williams, who occupied the Professorial chair at this time, although an elegant scholar, added nothing to botanical science, and for practical instruction in botany the undergraduates in Oxford had recourse to the teachings of Mr. Baxter,' *Gard. Chron.* Nov. 4, 1871. In 1825 Mr. Baxter issued his *Stirpes Cryptogamæ Oxonienses* and began forming his collection of Mosses and *Epiphyllous Fungi*, when the study of the latter plants was limited

to very few Botanists. He was a frequent correspondent of Purton, Dr. Greville, Mr. Sabine, Mr. Borrer and the Rev. A. Bloxam.

† In 1834 he published the first volume of *British Phænogamous Botany*, or British Flowering plants, with figures and descriptions of the genera. The plates are of unequal merit, but most of them are very good, and possess a special value, each being drawn from an individual plant, the locality or origin of which is usually stated. The text bears witness to Baxter's keenness of observation, and to his untiring industry. Very numerous localities, many of which are original, are given for the rarer plants. The Fungi found on the various plants are also enumerated. Many of the plants and fungi are still preserved in the Oxford Gardens, to which they were presented by his son in 1884. In addition to his literary work, he was indefatigable in his arrangement of the gardens. He raised their level so that the floods which formerly did much injury were kept out. He got together a nearly complete collection of living British Grasses and Willows, and a large number of hardy herbaceous plants, so that for its size the Oxford Botanic Garden was one of the most celebrated in the Kingdom.

In 1831 he revisited Rugby with his son, Mr. W. H. Baxter, for the purpose of ascertaining what plants grew in the neighbourhood. He contemplated publishing a Flora of that district, but never carried it into effect. Nearly 400 plants were noted by him, some being interesting, such as *Radiola* and *Inula Pulicaria*. *Peplis Portula* was also found in considerable abundance at Hill Morton. In his British Plants he says, 'How often is a little simple flower the source of most delightful and pleasing recollections! Hill Morton is the birth-place of my mother, and the circumstance of merely recording the name of this humble plant, after having seen it in such abundance in the place mentioned, seems to lead me back to the happy days of my childhood, many of which were spent amongst my relations and friends in that pleasant village.'

In 1832 a Natural History Society of Oxford was formed, Baxter taking a prominent part in its work. About this time he visited Thame and formed a small herbarium of the plants of that district. This included *Rumex maritimus* and *Rosa systyla* new to the county. Baxter contributed in conjunction with Mr. Ayres a paper on the *Oxfordshire Cryptogams* to the *Phytologist*, i. 661, 702. On the death of Dr. Williams, in 1834, Dr. Daubeney was chosen Professor, and a re-arrangement of the gardens was at once undertaken. Baxter rendered considerable assistance to Rev. R. Walker in preparing the *Flora of Oxfordshire*, indeed, almost all the new localities in that work are owing to Baxter's industry. In 1851 Baxter retired from the active management of the gardens, being succeeded by his son, Mr. W. H. Baxter, who still worthily occupies the position. Mr. W. Baxter, according to the *Gardeners' Chronicle*, had a trifling pension allowed him, 'in amount quite inadequate to the merits of the recipient.' His private life was beyond reproach, and his unassuming

manner and readiness to assist impressed most favourably all who came in contact with him. To his employes his even temper and kindness endeared him. He was also singularly temperate in habit. He died on Nov. 1, 1871, in the 84th year of his age. There is a print of Baxter after a drawing by Burt in the Hope Collection. Among other plants Baxter added to the Oxford Flora *Senecio saracenicus*, *Mentha sylvestris*, *Myosotis cæspitosa* and *versicolor*, *Luzula Forsteri*, *Blysmus compressus*, *Bromus arvensis*, *Salix Hoffmaniana*, *S. rugosa*, *Eriophorum latifolium*, *Diplo-taxis muralis*, *Rosa sepium*, *Ananthe Lachenalii*, *Valerianella carinata*, *V. dentata*, *Erythræa pulchella*, *Lolium temulentum*, *Prunus domestica*, *Sedum album*, *Carex Pseudo Cyperus*, *Juncus obtusiflorus*, *Potamogeton prælongus*, *Polygonum mite*, *Epilobium parviflorum*, *Rosa sepium*, *Salix decipiens*, *undulata*, *Helix*, *aquatica*, *oleifolia*, *Anacharis*, etc.

In 1838 appeared the Flora of Oxfordshire and its adjoining counties (comprising the flowering plants only) by Richard Walker, B.D., F.L.S., Fellow of Magdalen College. This work, though it appeared some 40 years after Sibthorp's Flora, did not add much to the knowledge of the county flora; few additional plants being given, and little or no attempt being made to show their distribution in the county. The descriptions of the species are given in clear and easy language, and it was probably the intention of the author rather to make a special feature of this, than to add plant records. It is arranged according to the Linnæan system. The habitats of the plant are evidently taken from a general flora and have no local significance. We are told for instance that *Myrrhis odorata* (a garden escape at the best) is a native of 'mountainous pastures.' Sibthorp's locality, which Walker alone quotes, of 'Rose Lane,' scarcely being applicable. Many species which are given without special localities are really very rare plants in Oxford, e.g. *Solidago Virgo Aurea*, *Anthriscus vulgaris*; Mr. Walker evidently having in his mind their general distribution in England and not their local one.

The localised additions made by Mr. Walker are *Camelina sativa*, and *Lotus tenuis*.

About 20 other species previously unrecorded are also inserted.

Richard Walker, the author of the Flora, was born at Norwich, on March 17, 1791, and was educated at the Free School of that city under Dr. Forster. He was son of the Rev. John Walker, Minor Canon of Norwich. Sometime chorister of Magdalen College. Richard Walker matriculated at Balliol College in Oct. 1810, became Demy of Magdalen 1812, took degree of B.A. Dec. 1, 1814, M.A. April 16, 1817, B.D. Dec. 17, 1824, was chosen Fellow of Magdalen 1821, was afterwards Dean, Bursar, and Vice-President, and was Master of Magdalen College School, 1828-1844. He was ordained Deacon by Bathurst, Bishop of Norwich, and Priest by Fisher, Bishop of Salisbury; and was curate at Tilehurst, Berks. He married 1852, Eliza Naomi, daughter of David Davies, M.D. He died Dec. 31, 1870, and was buried at Olveston, near Thornbury.

Bloxam's Register of Magdalen College, vii. 252. Besides the *Flora* Mr. Walker was editor or author of several works and assisted the late venerable Dr. Routh, President of Magdalen, in correcting for the press the second edition of the *Reliquiæ Sacræ*. His wife still survives and retains his herbarium of Oxford plants.

In 1839, Mr. W. Wilson Saunders, F.L.S., published in the *Magazine of Natural History*, n. s. vol. iii., pp. 239-242, May 1839, a list of a few rare or interesting plants noticed in the neighbourhood of Kirtlington. His very valuable general herbarium has become the property of the University.

In 1841 appeared a 'Catalogue of Plants growing about Banbury,' by Geo. Gulliver, F.R.S., F.L.S., Assistant Surgeon to the Royal Regiment of Horse Guards, a valuable contribution to our Flora as the district round Banbury had previously been unworked. Mr. Gulliver adds *Hypericum quadrangulum* (*dubium*), *Isatis*, *Hesperis*, *Crataegus* var., *Cuscuta Epithymum*, and 3 or 4 other plants in his list of 400 species; his catalogue also including a large number of Cryptogams. A few plants inserted are evidently errors. These are *Sonchus palustris*, *Stachys germanica*, *Vella annua* and probably *Carex lævigata*. His Herbarium was presented to the Literary Society of Chatham. Mr. Gulliver was born at Banbury on the 4th of June, 1804. He early commenced the study of Botany and between 1818 and 1824 made a collection of plants which formed the basis of his Banbury list. This list however was not published as we have seen till 1841. In 1860 an article by him on *The Marginal nerves of the leaves of Mosses* appeared in the *Annals of Natural History*; and in 1861 he contributed a series of papers on *Raphides* to the same Journal. In 1866 he drew attention in the *Journal of Botany* to the difference in the size of the pollen grains of *Lotus corniculatus* and *L. major* (*ptilosus*). In 1868 he took up his residence at Canterbury, where he became Secretary to the East Kent Natural History Society, and it was at Canterbury he died on Nov. 17, 1882.

In the *Phytologist*, vol. v., p. 153, is an interesting paper on the Plants of the Goring district, by Mr. W. Pamplin, A.L.S., in which are noticed most of the plants peculiar to the Chalk district. Mr. Pamplin has favoured me with many notes relating to that and other portions of the county.

About 1840, Dr. Ayres of Thame did good work in the lower Cryptogams and in conjunction with Mr. Baxter published a list in the *Phytologist*, vol. i., pp. 661, 702.

Towards the end of 1841 appeared *The Botany of the Neighbourhood of Banbury*, with a sketch of the Geology furnished for Mr. Alfred Beesley's 'History of Banbury,' by Mr. Thomas Beesley. This is a list of about 500 species occurring in the north of the county, besides a large number of Cryptogams. This list with the author's MS. notes was used as the chief source of Oxford records in *Topographical Botany* by Mr. H. C. Watson. The additions to our Flora made by Mr. Beesley in his

list, and in subsequent investigations, include *Teesdalia*, *Polygala depressa*, *Hypericum calycinum*, *Alyssum calycinum*, *Melilotus alba*, *Arctium minus*, *Potamogeton junceus* (*flabellatus*), *P. rufescens*, *Cuscuta Trifolit* and several *Rosæ* and *Rubi*. Mr. Beesley is fortunately still with us, but Geology has of late been the especial object of his studies, and the many valuable papers contributed by him to various scientific publications show an intimate acquaintance with that and other branches of science. He still retains a large herbarium and a very valuable collection of fossils, especially of Liassic and Oolitic strata.

For some years he conducted the Science Classes with considerable success, one of his pupils being Alfred French, whose botanical zeal was fostered, if not formed, by the example and assistance of Mr. Beesley.

Alfred French was born at Banbury in 1839. He was by trade a baker. In 1861 he attended Mr. Beesley's class in Animal Physiology. In 1863 he took a first class in Inorganic, and a bronze medal in Organic Chemistry. In 1864 he commenced Botany, and gained a prize offered by Mr. Beesley, for a local collection of plants, and subsequently qualified as a teacher in Botany. Henceforward he became an unwearied worker at the local flora, adding many species to the lists made by Gulliver and Beesley. The recent sub-division of many species, and the attention paid to critical plants afforded opportunities which French seized upon. In the study he was materially assisted by his friend Mr. E. Walford. In 1869 and 1870 he conducted Botanical classes at Banbury with a fair amount of success. His manner as a teacher, though much marred by an indifferent accent, was earnest, and commanded the attention of his pupils, but the miserable pecuniary result was often a subject of complaint.

About this time the establishment of co-operative stores caused the loss of much trade, and affairs looked so gloomy that he determined to sell his business and try other means of gaining a livelihood. He succeeded in obtaining two courses of instruction for Science teacher in London, where he endured grim poverty, and had many dark hours. A kind introduction to Mr. Carruthers of the British Museum, led to his being installed as attendant in the Botanical Department where he met with congenial employment and much kindness, from Mr. Carruthers and Dr. Trimen. Though ordinary menial work would have devolved upon the newest comer, it shows the estimation in which French was held, when we find he was exempted from it, and put to the work of herbarium arrangement and classification. For this consideration French was extremely grateful. His holidays were spent in Oxfordshire, and on one of these occasions he found *Salvia pratensis* in the locality given in Sibthorp's Flora, and afterwards contributed a paper on its distribution in Oxfordshire to the *Journal of Botany*. He gave a course of lectures on Botany at the Polytechnic Institution which were not very successful. His health began to give way and for two years he was subject to epileptic attacks, to one of which he succumbed, Oct. 22, 1879, aged 40 years.

He was fond of poetry, and composed some verses of no inconsiderable merit. The following was written by him on Feb. 21, 1864:—

SONNET

On a Botanical Visit to Hanwell Plantation.

Mid leafless trees, and rugged banks that sink
 To marshy hollows, and grotesquely rise,
 Strewn with last Autumn's leaves, there meet the eyes
 Fair forms that Flora fondly gives to link
 Summer with Summer; there in angel guise
 The milk-white snowdrop hangs its humble head,
 The *Eranthis* peeping from the ground doth rise,
 And gilds it with its thousands in a bed,
 While here and there the verdant Hellebore
 In little drooping clusters sweetly grows;
 The blended life and ruin hanging o'er
 Th' unwithered lengthy Harts-tongue doth repose;
 There all the winter blooms some pretty thing
 That smiles with radiant promises of Spring.

In the Preface I have stated that French contemplated a *Flora of Oxfordshire*, and it is there explained what amount of material he had collected for that purpose. In addition to copying out the records in Ray, Sibthorp, Walker, and the Banbury lists, French's personal additions were numerous. They include *Barbarea præcox*, *Polygala vulgaris*, *Trifolium hybridum*, *Filago apiculata*, *Avena strigosa*, *Atriplex erecta*, *Monotropa hirsuta*, *Arctium intermedium*, *Rosa stylosa*, *Briggsii*, *Rubus Koehleri*, *rudis*, etc., and a large number of casuals.

In 1857, Maxwell T. Masters read a paper on the Oxfordshire Flora before the Ashmolean Society, in which Dr. Masters has contrasted the Floras of Yorkshire and Oxford, and put in a tabulated form the way in which our Flora is built up of alien and native plants, and the relative percentage of *Monocotyledons* and *Dicotyledons*, etc. The principal aliens are enumerated, and the more interesting plants mentioned.

Dr. Masters estimated the number of native plants in Oxfordshire to be 728, Denizens 29, Colonists 31, total 788, with 59 aliens and 19 incognita. Of these 573 are *Dicotyledons*, 192 *Monocotyledons*, and 23 Ferns. As to duration, 196 are Annuals, 36 Biennial, 481 Perennial, and 75 woody. Their types of distribution being 502 British, 235 English, 4 Scottish, 39 Germanic, and 5 Atlantic. But 2 of the 4 Scottish *Festuca sylvatica* and *Polypodium Dryopteris* do not occur in the county, and the remaining two *Sanguisorba officinalis* and *Pyrola minor* are not very characteristic types of the Scottish Flora. Of the 5 Atlantic types *Hypericum elodes* is extinct. *Wahlenbergia* has not been found in Oxon.

and *Cotyledon* was probably not native; the three others are local or doubtful.

Their place of growth is thus classified:—

Pratal and Pascual 123, Ericetal 38, Glareal 43, Uliginal and Inundatal 50, Paludal and Lacustral 134, Viatical 70, Agrestal 97, Rupestral 27, Septal 86, Sylvestral 120.

Mr. H. Boswell's list of Additions to the Flora of Oxfordshire communicated to the *Phytologist* in 1860, p. 99, next commands attention, although this was actually made prior to Alfred French's work. Mr. Boswell's name will be found to occur frequently in the Flora, his list of Oxon plants made 1856–1876 being very valuable. Since that time he has paid special attention to Bryology. His very complete list of our county mosses will be found in the Appendix. In *Phanerogams* Mr. Boswell added *Vicia lathyroides*, *Corydalis claviculata*, *Agrimonia odorata*, *Mentha cardiaca*, *Sonchus asper*, *Scirpus multicaulis*, *Carex axillaris*, *C. fulva* (*Hornschuchiana*), *Aspidium angulare*, *Medicago sativa*, *Polygonatum multiflorum*, *Orchis incarnata*, etc. Papers on Mosses by Mr. Boswell will be found in *Phyt. n.s.* 1860, pp. 344, 369, 1861, p. 262; *Jour. Bot.* 1872, p. 363, 1885, p. 3.

In 1871, Mr. W. T. Thistleton Dyer contributed an article on *Oxfordshire Plants* to the *Journal of Botany*, p. 145, which added *Ranunculus penicillatus*, *R. Drouetii*, *Caltha Guerangerii*, *Draba brachycarpa* and *Geum intermedium* to our list.

In 1873, Mr. Watson published the first volume of Topographical Botany or records of plant distribution through the British Isles. For Oxfordshire *Beesley's Banbury List* formed the basis, the records without personal vouchers being taken from *Sibthorp* and *Walker*. It appears likely that Mr. Watson never botanized in Oxford. In *Top. Bot.* *Potamogeton obtusifolius* and *Osmunda regalis* are included in error, there being no authority for their occurrence. The plant recorded as *P. heterophyllus* is not that species, and should be omitted or queried. *Orobanche major* and *Polypodium Dryopteris* should be omitted, our plants being *Orobanche elatior* and *P. calcareum*. *Typha angustifolia* is put in on faith of a Warwickshire locality, but it is a native of Oxford. *Carex laxigata* is probably erroneous. *Narcissus Pseudo Narcissus*, *Carpinus*, *Helleborus viridis* and *fetidus* are 'branded' or 'bracketed.' These should be put as native plants. To *Vinca minor* a star might be attached, and *Mercurialis annua* is certainly alien.

Among more recent workers may be mentioned Revs. R. F. and E. F. Linton, M.A., H. E. Fox, M.A., E. Fox, M.A., W. Newbould, M.A., F. Bennett, M.A., F. Smith, E. Marshall, J. Barnes, W. Moyle Rogers, M.A., A. Robertson, M.A., B. D'Oyley Aplin; Messrs. F. T. Richards, M.A., Bolton King, B.A., and H. E. Garnsey, M.A., have added much to our county flora. Mr. King in his short sojourn in Oxford added several plants to our list. W. Mathews, M.A., F. Westcombe, E. Walford,

O. V. Aplin, R. Rogers, W. Whitwell, W. Holliday, T. Thurland, J. Duthie, F. Tufnail, H. Ridley, M.A., F. Arnold Lees, F.L.S., Honbl. J. L. Warren, Lord Selborne, Mrs. Davis, Dr. Boswell (Syme), F. Westell, have also worked at various portions of the county. Miss Beatrice Taylor's extensive list of Fungi is given in the Appendix.

Chronological list of the Oxford Professors of Botany. The foundation of the gardens took place July 25, 1632 :—

First Danby Professor, Robt. Morison	1670-1683
Jacob Bobart, Jun.	1683-1719
E. Sandys }	
G. Trower }	1719-1728
J. Dillenius, Sherardian Professor	1728-1747
Dr. Humphrey Sibthorp	1747-1784
John Sibthorp, Author of the Flora	1784-1795
Prof. Williams	1795-1834
Prof. Daubeny, M.A.	1834-1867
Prof. Lawson	1868-1882
Prof. I. Bayley Balfour	1884 —



APPENDIX.

MOSSES AND HEPATICÆ.

CONTRIBUTED BY

HENRY BOSWELL.

1

APPENDIX.

MOSSES AND HEPATICÆ.

THERE is little in the general aspect of Oxfordshire to commend it at first sight to the notice of students of the smaller Cryptogamia. A universal prospect of high cultivation, with a general absence of rocks, waterfalls, heaths or extensive woods, suggesting little hope of mosses for the seeker; and it must be admitted that closer inspection will for the most part only confirm the unfavourable impression he would have formed. During the last thirty or forty years too the increase of drainage and cultivation has continued at an accelerated pace, and many places once yielding good botanical prospects have been destroyed. Shotover, the famous haunt of Oxford naturalists, has suffered great deterioration, though a little yet remains; Bullingdon Green, once free and open, has been ploughed and enclosed; the adjacent bog, so rich in flowers and mosses a quarter of a century ago, is drained and yields not much now but a wretched crop of bad corn and worse potatoes. Of Wychwood Forest little is left and that little constantly diminishing, many acres of pleasant woodland having been turned into a desert of naked fields intersected by equally naked and very ugly stone walls, and everywhere similar processes have been more or less actively going on; nor has the builder's assistance been wanting, many old botanising grounds being now covered with houses. Moreover the air of the region except in rainy autumn or mid-winter is too dry to promote the growth of the moisture-loving tribes of mosses.

Still there is much of interest remaining, and when summer with its flowers has gone by, plenty of work exists for those who choose to seek it about roadside walls, hedges, woods and other localities, with which to fill up the interval from October to May, and though many botanists are apprehensive of the supposed difficulty of the study of mosses this difficulty will be found to diminish when the subject is resolutely approached, and the pursuit will appear full of interest and satisfaction. Microscopes of high power and complex structure are altogether unnecessary; a simple instrument of moderate magnifying capacity is all

that is required, and much may be done with no further assistance than a pocket lens.

For books on the subject, Wilson's *Bryologia Britannica*, though unfortunately out of print, may be seen in the Radcliffe Library at the Museum, as well as the larger *Bryologia Europæa* of Bruch and Schimper. These works contain figures and descriptions of every detail in the structure and economy of Mosses; as a useful handbook there is none better than Hobkirk's *Synopsis of British Mosses*, Edition 2nd, and the more advanced student can obtain Schimper's excellent *Synopsis Muscorum Europæorum*, written in very easy Latin, while Dr. Braithwaite's *British Moss-Flora*, now in progress and partially published will present when finished a splendid work of elaborate completeness, containing detailed drawings and descriptions of every British species. The literature of Hepaticæ is somewhat less ample and convenient than that of Mosses, but Cooke's illustrated Catalogue, published at trifling price by *Science-Gossip* (Hardwicke), will be found very useful, and it is understood that Dr. Carrington is about to complete his larger work, so long deferred. Hooker's splendid *British Jungermanniæ* will also be found in the Radcliffe Library.

A good deal of difference of opinion exists amongst writers on the subject of classification and arrangement. I have followed here nearly the same order that was adopted in the 'London Catalogue' (1881), which accords with Jæger's *Adumbratio Muscorum*, and in essential features with Schimper's *Synopsis*, differing but little from Wilson's *Bryologia Britannica*.

It will probably be observed that the localities referred to lie mostly in the middle portion of the county and within a limited distance from Oxford. In fact I have but very imperfectly worked the southern extremity, and still more so the northern. I could never ascertain the existence of a coadjutor resident in those parts, and flying visits of a day or two by no means suffice for the thorough examination of localities, especially in the short days of winter. It is therefore probable that many interesting species unnoticed by me, and some additions to the following enumeration, still await discovery in the country northwards from Wychwood Forest and Bicester, and yet more especially south of Oxford in the wooded and beautiful region about Nettlebed, Henley, and the Chiltern Hills.

H. B.

January 1886.

MUSCI.**MOSSES PROPER. *Urn-Mosses* of Lindley.**

Division I. **ACROCARPI**; *stems erect tufted; fruit terminal or apical.*

BRUCHIDÆ.**PLEURIDIUM**, Brid.**P. nitidum**, Hedw. (*Phascum*.)

Damp ground, newly broken; not common. Winter. By Fifield Wood near Burford; Stanton St. John; damp ride, Bagley Wood, Berks.

P. subulatum, Linn.

Sandy and gravelly banks, and in woods. April. Wychwood Forest; Shotover; Wheatley; Nuneham; Bagley Wood, Berks.

P. alternifolium, Br. & Sch.

Hedge-banks in sandy soil; rare. April. Ramsden Heath; between Shotover and Cuddesdon, abundant in 1861 and 1862. Bagley Wood, scarce, 1866.

WEISSIDÆ.**SYSTEGIUM**, Sch.**S. crispum**, Hedw. (*Phascum*.)

Banks and fields, very rare. Spring. Roadside between Gosford and Weston-on-the-Green; scarce. Mr. W. Holliday, 1861.

S. multicapsulare, Sm. (*Phascum*.)

Fields and banks, very rare. Spring. Grassy slope near Chilswell Farm, Berks, very scarce, 1861.

GYROWEISSIA, Sch.**G. tenuis**, Schrad. (*Gymnostomum*.)

Rocks and walls in damp or shady places and under herbage; rare. June. Stones in the canal banks in several places—near Oxford, Kidlington, Heyford, and Banbury; old stone-pits in Blenheim Park.

WEISSIA, Hedw.**W. microstoma**, Hedw. (*Gymnostomum*.)

Fields and banks on bare spots amongst grass, not common. April. Near Stow Wood; between Shotover and Cuddesdon, with *Pleuridium alternifolium*; Bullington Green; Bagley Wood and Pusey in Berks.

W. viridula, Brid. (*controversa*, Hedw.)

Banks, etc., frequent. April. Near Islip; Bicester; Stow Wood and Beckley; Bayswater; Caversham Warren; Stokenchurch and Radnage; Bagley Wood and Pusey, Berks.

DICRANOWEISSIA, Lindb.**D. cirrhata**, Hedw. (*Weissia*.)

Old thatch, posts, rails, etc. Very rare. April. On an old shed at Ascott-under-Wychwood in plenty, 1879. The shed has been since removed and the moss destroyed, and I have not found it elsewhere in these counties. In Worcestershire it is frequent, and also in Dorset. Its rarity here is rather remarkable.

DICRANELLA, Sch.**D. cerviculata**, Hedw. (*Dicranum*.)

On turfy or peaty banks and cuttings. June, July. Bullingdon Bog, rare; 1861; 1872.

D. varia, Hedw. (*Dicranum*.)

Moist banks and broken ground. October, November. Banks of the Windrush near Minster Lovell; Bladon; Woodeaton; Wytham; Godstow; Shotover Hill; Bullingdon; Sandford Lasher and Radley, Berks.

D. heteromalla, Hedw. (*Dicranum*.)

Sandy and gravelly banks and woods. November. Wychwood Forest; Headington Wick; Shotover; Stow Wood; near Goring; Caversham; etc. Bagley, Wootton, and Tubney, Berks.

DICRANUM, Hedw.**D. scoparium**, Hedw.

Woods, gravelly heaths and banks; occasionally on old thatched roofs; frequent but not very commonly in fruit. July, August. Subject to a good deal of variation in size and colour according to locality, but we seem to have none of the named varieties.

D. palustre, Hedw.

Shady woods, wet heaths and grassy places; not frequent; no fruit. Summer. Wychwood Forest; Eynsham Demesnes; Shotover Hill and Plantations; Bagley Wood and Wootton, Berks. A form with falcate leaves is found at Wychwood.

D. majus, Turn.

Shady banks in hilly woods. July, August. Singe Wood near Hailey; more frequent in the South of Oxon and also in Bucks; woods about Stokenchurch, Watlington, Henley, and Wycombe. One of the largest and handsomest British mosses.

CAMPYLOPUS, Brid.**C. flexuosus**, Brid.

Moist shady banks in rocky or gravelly soil; frequent in mountain districts, rare here. April. Wychwood Forest; also Bagley Wood and Powder Hill Copse, scarce, growing with the next species.

C. torulosus, Br. & Sch.**C. pyriformis**, Brid.

Gravelly and sandy ground amongst bushes, and on heaths and commons. April. Ramsden Heath; Headington Wick Copse; Shotover Hill; Bagley Wood, Wootton, and Cumnor, Berks. Fruits very freely.

LEUCOBRYUM, Hampe.**L. glaucum**, Linn. (*Bryum*.)

Moist heaths, moors, and shady woods. April. Rare here, and not fruiting; the foliage continues unchanged till frost. Woods near Nettlebed, *Sibthorp* about 1790, and plentiful there in 1859, 1866; Woods near Goring, 1877; Powder Hill Copse near Cumnor, very scarce.

The late Mr. Baxter told me about 1860 that this moss had existed in Bagley Wood twenty years before, but I sought in vain for it. Like some others it seems exterminated in that place.

CERATODON, Brid.**C. purpureus**, Linn. (*Bryum*.)

Tops of old walls, banks, and gravelly heaths, also on thatched roofs; frequent. April. Less common than in some counties; generally the commonest of mosses, next to *Funaria*, and like that found all over the world.

Seligeria pusilla should be found on the chalk in the south of the county; it occurs in similar situations in Bedfordshire, whence it has been sent by Mr. Saunders, and probably it exists in the south of Oxfordshire though hitherto I have not met with it.

FISSIDENS, Hedw.**F. exilis**, Hedw. (?)**F. Bloxami**, Wils.

Shady banks and sides of woods in clayey soil; either rare or overlooked from its minuteness. February, March. Stockley Wood near Asthallenge; Tar Wood; Watereaton Copse; borders of Bagley Wood and Pusey Wood, Berks.

F. pusillus, Wils.**F. viridulus**, var. *pusillus*, Bryol. Brit.

Hedge-banks and bushy places, on stones and earth; rare. February, March. Roadside near Hailey; rough banks above the Windrush near Witney.

F. viridulus, var. **fontanus**, Wils.*F. fontanus* & *F. crassipes*, Wils. olim.

On stones in sluices and falling water. October, November. Sluice in the Windrush near Witney; side of the Canal near Heyford and Kidlington; by the Botley Road; about Sandford Lasher, large and fine.

F. incurvus, Schwg., W. & M.

Banks of clay or sand in thickets, groves, and about sides of woods. February. Wychwood Forest; Ditchley Park; Tar Wood; Noke; Watereaton; near Stokenchurch; also Bagley, Wytham, Cumnor, and Buckland, Berks.

F. bryoides, Hedw.

Sandy and gravelly soil in woods and hedges, and about decaying stumps. February, March. Wychwood Forest; Ditchley Park; Bletchington; Watereaton; Shotover, etc. Always found rather sparingly though less rare than some of the foregoing. *F. inconstans* Schimp. Synops. seems a form of this.

F. adiantoides, (Hedw.) Br. & Sch.*F. majus*, Mitt.

Bogs; wet grassy ground. October, November. Wychwood Forest; Weston-on-the-Green; Headington Wick; Shotover; Bullingdon. The largest of our species, sometimes growing to a length of three or four inches.

F. decipiens, De Not.*F. rupestris*, Wils. *F. adiantoides*, (Hedw.) Mitt.

Rocky or stony banks, etc., rare or overlooked as a small form of the last, which it much resembles. Holton Stone Pits; near Stokenchurch; barren. Mr. Mitten in the Journ. Linn. Soc. asserts this to be the *F. adiantoides* of Hedwig, instead of the last species which has so long been taken as such. *F. cristatus*, Wils. from India seems to be identical with this.

F. taxifolius, (Linn.)

Moist shady banks, woods and groves, especially in a clay soil. December to February. Wychwood Forest; Ditchley Park; Gravehill Wood near Bicester; Shotover; Headington Wick; Stokenchurch; Wytham Woods, etc.

POTTIDÆ.**PHASCUM**, Linn.**P. serratum**, Schreb.*Ephemerum*, Hampe.

Shady banks and fallows in light soil, especially sandy. Winter. Stockley Wood, near Asthalleligh; between Shotover and Cuddesdon; Nuneham; borders of Bagley Wood. Allied in structure to *Funaria*.

P. Florkeanum, W. & M.*Microbryum*, Schpr.

Fallow ground in fields and on banks; rare. October, November. Potato ground, side of road between Wolvercote and Yarnton; W. Holliday and H. B., 1867. Its extreme minuteness may cause this plant to be overlooked and hence seem more rare than it really is.

P. muticum, Schreb.

Sandy ground in sheltered spots by woods and hedges; not common. November. Stockley Wood near Asthallenge; between Shotover and Cuddesdon; Chilswell Hills and Wootton, Berks. Tufted, hence much more readily seen than the last.

P. cuspidatum, Schreb.

Fallow fields, roadside banks, newly turned soil; common. Winter.

P. bryoides, Dicks.

Fallow fields, banks, etc., rare. Winter. Fields near Headington Wick Copse and Stow Wood; wall top, Iffley. This seems a connecting link between *Phascum* and the next genus to which some late writers remove it, but the lid seems to be scarcely separable.

POTTIA, Ehrh.**P. minutula**, Br. & Sch.

Banks and fallow fields, occasionally. Winter. Witney; Minster Lovell; Hampton Poyle; Cumnor Hill, etc. It came up in great abundance on the new-made banks of the river below Godstow in 1861.

P. truncata, Linn. (*Gymnostomum*.)

Newly exposed soil in moist and shaded places, not uncommon. Winter. Wychwood; Watereaton; Iffley; Headington, etc.

P. intermedia, (Turn.)*P. truncata*, β , *major*, Bryol. Brit.

Old walls and banks, not common. February. Cowley; Garsington; Wheatley; Hincksey.

P. lanceolata, Dicks.*Anacalypta*, Roehl.; Bry. Brit.

Turfy old walls and banks in light soil in shady places; frequent. February. Wychwood Forest; Noke; Watereaton; Kirtlington; Stanton St. John; Shotover Plantations; Holton Stone Pits; Stokenchurch; Botley and Hincksey, Berks.

LEPTODONTIUM, Hampe.**L. flexifolium**, Hook. & Tayl. (*Didymodon*.)

Gravelly heathy spots in woods, and barren moorlands, rare. February.

Not in Oxfordshire apparently, but plentiful about Bagley Wood and Wootton in Berks. Its true affinities are certain Indian and South American species, not such plants as our *D. rubellus* and *luridus*, which rather pertain to *Trichostomum*. It should occur in the Nettlebed region.

EUCLADIUM, Sch.

E. verticillatum, Linn. (*Weissia*.)

Sluices and dripping places in limestone banks and rocks; rare here. June. By the spring in Wychwood Forest; by the Windrush near Witney; banks of the Canal near Kidlington and Heyford.

LEPTOTRICHUM, Hampe.

L. flexicaule, Hampe.

Trichostomum, Hook. & Tayl.; *Ditrichum*, Hampe.

Dry limestone banks, calcareous rocks; the fruit unknown in Britain. Wychwood Forest; St. Kitt's Quarries, Burford; Stonesfield, on debris of quarries; Holton Stone Pits; near Stokenchurch.

TRICHOSTOMUM, Sm.

T. rubellum, C. Mull. (*Didymodon*, Br. & Sch.)

Weissia curvirostris, H. & T.

Shady old walls, banks, stones; occasionally on thatch and about trees. October, November. Wychwood; Yarnton; Kirtlington; Iffley and Rose Hill; Headington Wick Copse; Stanton St. John, etc. Buckland, and Wytham, Berks.

T. luridum.

Didymodon luridus, Hornsch.

Calcareous walls, apparently rare throughout Britain: not fertile in Oxon as yet. Winter. Ascott-under-Wychwood; near Hailey; Witney; Headington Hill; Sandford Lasher; Cumnor. Always scanty, and apparently all male plants.

T. crispulum, Bruch.

Limestone rocks and banks, chiefly near the sea, where it forms dense tufts. It occurs in single plants, scattered among grass at Holton Stone Pits and may perhaps be found some time in the Stokenchurch region.

T. tophaceum, Brid.

Wet and dripping walls and banks of streams. Fruit November to February. Near Witney; Canal banks; Bullingdon Bog; roadside, Headington Hill near the new reservoir, 1880, '81, fruiting copiously.

TORTULA, Hedw.*Barbula*, Br. & Sch.**T. cavifolia**, Ehrh. (*Pottia*.)

On walls capped with mud. Winter. One of the characteristic mosses of this and the neighbouring counties, occurring in great profusion wherever the walls have been capped with the oolitic mud from the roads, but requiring fresh soil it is seldom constant to a place beyond one season.

T. lamellata, Lindb.*Pottia cavifolia*, ♂, *gracilis*, Wils. Bry. Brit.

In similar situations to the last, but rather less frequent. Distinguished by its greater height and more tufted habit. October to February. Bicester; Noke; Wheatley; Witney; Iffley, etc.

T. rigida, Schultz.*T. stellata*, Braith. Moss-Flora.

In similar situations to the last two. Winter. More robust and with a conspicuous strongly twisted, bright scarlet peristome. In very wet summers it appears as early as August, but generally not till November. Salford; Charlbury; Witney; Noke; Headington; Wheatley; Bampton; Standlake. Berks and Bucks.

T. ambigua, Br. & Sch.

In similar situations, and often growing in company with the last; also descending the sides of walls with *T. muralis*. Winter. A little larger than *rigida*, the capsule quite cylindrical, the peristome shorter and less twisted, the calyptra scarcely descending below the lid.

T. aloides, Koch.

Old turfy walls and embankments, gravelly banks, and on clay. Winter. Not so frequent as the last two about Oxford. Habit more tufted, leaves more acute pointed, capsule inclined. Islip and Noke; Kirtlington; Ditchley; Rose Hill; Shotover Plantations. More frequent in the Witney district; Hailey, etc.

T. unguiculata, Hedw.

Gravelly banks, old walls, etc., very common and somewhat variable. Winter. Var. *obtusifolia*, canal bank near Wolvercote.

T. fallax, Hedw.

Walls, banks, broken ground either clay or calcareous; not very common, and rare in fruit. Varies much in size and habit. Winter. Near Islip and Bicester; railway bank between Witney and Bampton; sides of drains at Stow Wood; Bullingdon; Shotover Hill. Var. *brevifolia*, gravel-pits near Bagley Wood and near Faringdon, Berks.

T. vinealis, Brid.

Dry calcareous walls, frequent and sometimes in abundance, but rare in fruit. April, May. On Magdalen Bridge, before the widening; roadside Headington Hill; Cumnor Hill, Berks. The pale green foliage of the barren plant is very conspicuous in winter, but as summer approaches it gradually becomes brown.

T. Hornschuchiana, Schultz.

Calcareous walls; rare. April. Roadside near Noke in some plenty, 1860. Wheatley 1869; Hincksey 1872, 1874.

T. rigidula, (Dicks.) Hook. & Tayl.

Trichost. rigidulum, β , *densum*, Wils.

Walls and stones, rare. Autumn. About Witney, Asthalleigh, and Burford, 1877; Wall by Singe Wood; old quarries in Wychwood Forest, 1879.

T. revoluta, Schwægr.

On calcareous walls, frequent. April. Charlbury; Witney; Headington Hill; Shotover; Wheatley; Forest Hill, etc. Hincksey and Cumnor, Berks.

T. convoluta, Hedw.

Calcareous walls and banks. April. Heyford; Kirtlington; Islip; Noke; Shotover; Wheatley; Bessilsleigh, Hincksey, and Cumnor, Berks. Readily known from the last species by the longer fruitstalk which is of a pale yellow throughout, like that of *Leptodontium flexifolium*.

T. sinuosa, (Wils.) Lindb.

Dicranella sinuosa, Wils. MS.

Didymodon, Schpr. Synops.

Foot of walls in loose gravelly soil; stones; wall tops, and about the bases of trees. Winter. Hanwell near Banbury; very scarce about Oxford; larger and more frequent about Witney; hedge-banks and sides of woods near Stokenchurch, Wycombe, and Henley; Sunningwell, Berks. A very curious moss, only found barren; 'c'est un beau *Didymodon*,' Dr. Schimper, in lit. 1870.

T. inclinata, Schwægr.

Calcareous banks. Winter or Spring. Amongst grass on dry banks, Holton Stone Pits, 1872, 1873. Barren, scarce; not unlike *T. unguiculata* in aspect. As far as I can ascertain the only locality yet known for this moss in Britain.

T. tortuosa, Linn.

On limestone walls and rocks. Rare here and not found in fruit. Spring. Walls at Asthalleigh and Widford near Burford, in fine large tufts.

***T. squarrosa*, Brid.**

Limestone banks and sandy-seashores. Scattered single plants occurred at Holton, with *Trichost. crispulum*, and *Tort. inclinata*, a very unexpected find, in 1872, 3, and 6.

***T. subulata*, Linn.**

Sandy hedge-banks; about trees and old walls. Spring. Rare here. Wychwood Forest; Shotover; Stow Wood; Headington Wick; near Henley. Foxcombe Hill and Pusey, Berks. Formerly abundant in Shotover Plantations, but almost destroyed by clearings about 1865.

***T. muralis*, Linn.**

On walls, either brick or stone, abundant and common. April. All through the early months of the year its numerous yellow stalks make it conspicuous. *Var. rupestris*, about Wychwood Forest in several places; between Shotover and Cuddesdon, on dry stone walls.

***T. marginata*, Br. & Sch.**

Shady damp walls, earth covered stones; rare. May, June. Near the church at Great Tew, in some abundance. Edges of beds in the Botanic Garden. Magd. Coll. Groves. Hincksey; Sunningwell, Mr. Holliday. Smaller and more delicate than the last, and fruiting later.

***T. latifolia*, Br. & Sch.**

Roots of trees, rotten wood, and stones by rivers; rare, and very rare in fruit. May. On one or two willows by the Cherwell, here and there; by the Evenlode near Stonesfield and Ascott, plentiful, sparingly in fruit; stone embankment, Christ Church Meadow, 1880. Wytham, Berks.

***T. lævipila*, Brid.**

Trunks of trees; sometimes on detached rocks. May. In Wychwood Forest; Witney; Blenheim Park; on willows by the Cherwell and Thames occasionally,—as Islip, Godstow, and Nuneham. Also on old orchard trees, as at Kidlington and Buckland.

***T. intermedia*, Brid.**

***T. ruralis*, β , *rupestris*, Wils.**

On dry calcareous walls and rocks. April. Near Burford; Witney; Hailey; Islip; Noke; Kirtlington, etc. Cumnor, Berks.

***T. ruralis*, Linn.**

Common on thatch, growing very large. April. On Sandy banks near Stow Wood. The capsules are often blighted by March frosts.

***T. papillosa*, Wils.**

Trunks of trees, rare. Fruit unknown in Europe but found in Australia. Orchard trees, Witney; Mr. Westall. On elms Kennington, Berks, Mr. Holliday. Abundant by the Ouse near Buckingham; H. B.

*GRIMMIDÆ.***CINCLIDOTUS**, Beauv.**C. fontinaloides**, Beauv.

Attached to trees and stones in streams. April. River Evenlode near Ascott; Cherwell near Islip and Sparsey Bridge; Thames near Godstow; Sandford; Nuneham. Stems 3 or 4 inches long with numerous capsules.

GRIMMIA, Ehrh.**G. apocarpa**, Hedw.

On stones and stone walls, occasionally. March. Heyford; Witney; Eynsham; Shotover; Islip; Hincksey; Cumnor, etc.

G. Pulvinata, Dill.

Stone walls, roofs, etc. Common. March, April. In conspicuous grey-green cushions.

G. orbicularis, Br. & Sch.

Calcareous walls and rocks; rare. February. Cumnor and Buckland, Berks. Sought unsuccessfully in Oxfordshire hitherto, but it ought to be found.

Racomitrium canescens is recorded by Sibthorp as occurring at Shotover in the latter part of the last century, but seems to have disappeared by the middle of this. I could find no trace of it in 1856 and subsequent years, and it is probably quite lost to us.

ZYGODON, Hook. & Tayl.**Z. viridissimus**, (Dicks.)

Trunks of trees, not very common; fruit rare. April. Between Banbury and Bodicote; Blenheim Park; Bladon; Wychwood Forest; Witney; Eynsham; Yarnton; Watereaton; Marston. Wytham, Pusey, and Buckland, Berks.

ULOTA, Mohr.**U. intermedia**, Schpr.

Trunks of trees in shady woods; rare. June, July. Wychwood Forest; Stokenchurch woods; near Nettlebed and Ipsden; Bagley Wood. Very scarce here and small in growth as compared with specimens from Westmoreland or Scotland. It seems most widely spread throughout Britain of the group to which it belongs, and is often misnamed *crispa* or *Bruchii* by young collectors.

ORTHOTRICHUM, Hedw.**O. saxatile**, Brid.; Wood in Phytologist, 1860.**O. anomalum**, Bryol. Brit.

Calcareous walls and rocks; frequent. April. Woodstock; Bladon; Witney; Stonesfield; Islip and Noke; Shotover. Hincksey, Cumnor, and Buckland, Berks. The true *O. anomalum* of Bryol. Europ. has sixteen

rib on the capsule instead of eight, and is found only on igneous rocks in the north.

***O. cupulatum*, Hoffm.**

Limestone rocks, walls, roofs, and bridges. April. Ascott-under-Wychwood, fine; Witney; Forest Hill; Littlemore; Cowley; Hincksey. Var. *nudum* near Sparsey Bridge. Less frequent than the last, liking a greater amount of shade and moisture.

***O. obtusifolium*, Schrad.**

Tree-trunks, rare. No fruit in Britain. On ash trees near Godstow, scarce; mixed with *O. tenellum* and *diaphanum*: 1878.

***O. tenellum*, Bruch.**

On trees, rare. May, June. Willows by the Cherwell in several places, but scarce; by the Thames near Godstow and Botley; ash trees Rousham and near Wytham and Godstow.

***O. affine*, Schrad.**

On trees, especially in woods and by streams, rather frequent and sometimes plentiful. June, July. Windrush Valley; Cherwell Valley; Nuneham; Stokenchurch and Henley; Bagley Wood, Pusey, Buckland, etc.

***O. diaphanum*, Schrad.**

On trees; willows by streams, hedge-row elms, etc.; frequent; also occasionally on stone walls. March, April.

***O. Lyellii*, H. & T.**

Trunks of trees, chiefly oaks in large shady woods; rare in fruit. June, July. Wychwood Forest; Singe Wood; Coggs; Bladon; Hell Copse, Stanton St. John; Nuneham; Stokenchurch; Bagley, Pusey, and very fine at Aldermaston, Berks.

***O. leiocarpum*, Br. & Sch.**

Trees; rare and always sparingly. March. Wychwood Forest; Bladon Woods; Bullingdon; Stokenchurch; Henley; Bagley Wood.

CALYMPERIDÆ.

ENCALYPTA, Schreb.

***E. vulgaris*, Hedw.**

E. extinctoria, L.

Old walls, banks, etc., chiefly such as are calcareous; frequent. March, April. Heyford; Woodstock; Witney; Chipping Norton; Islip; Bayswater; Shotover, etc. Hincksey and Cumnor, Berks.

***E. streptocarpa*, Hedw.**

Calcareous banks, limestone or mortared bridges, especially over streams. Spring. Much more rare and without fruit. Near Kirtlington; old

quarries in Wychwood and near Burford ; Asthalleigh ; debris of quarries at Stonesfield ; Holton Stone Pits.

SPLACHNIDÆ.

SPLACHNUM, Linn.

S. ampullaceum, Hedw.

In bogs and heaths, often on decayed cow-dung. May. Headington Wick about 1790 ; Sibth. Flora Oxon. Between Pusey and Buckland, Berks, scarce, 1860. J. S. Milne & H. B.

FUNARIDÆ.

PHYSCOMITRIUM, Brid.

P. pyriforme, (Linn.)

Moist ditches and muddy banks. April. Near Witney ; Binsey Lane ; Islip ; south side of Shotover Hill, etc. Not very common. Sometimes abundant on mud left by floods, as about Port Meadow in 1861, when it appeared in thousands.

FUNARIA, Schreb.

F. hygrometrica, Linn. (*Bryum*.)

Walls, banks, waste ground, especially where it has been burnt ; very common. April. Found all over the world : 'omnium muscorum vulgatissimum.' Its peristome an excellent and favourite microscopic object.

BARTRAMIDÆ.

BARTRAMIA, Hedw.

B. pomiformis, Linn.

Dry shady sandy banks ; rare. April, May. Side of Bagley Wood, very scarce. 1858-1884. Should be found in the south of Oxon.

PHILONOTIS, Brid.

P. fontana, Linn. (*Bryum*.)

Bartramia, Bryol. Brit.

Wet places, near springs, etc., rare here. June. Eynsham Demesnes ; south side of Shotover Hill ; north side of same ; Bagley Wood.

P. calcarea, Br. & Sch.

Bartramia, Bryol. Brit.

Wet places, bogs, and springs, chiefly in limestone ; rarely fruiting. June. Bullingdon with numerous perigonia and one capsule, 1861. Since almost entirely destroyed. Streamlet in Wychwood Forest, with *Mnium affine*. Sluices by the Canal near Yarnton.

*BRYOIDÆ.***BRYUM**, Dill.**B. pyriforme**, Linn.*Leptobryum*, Sch.

Sandy banks, walls, etc. Comes up occasionally in greenhouse pots, but seems not indigenous in Oxon, though I have found it in Worcestershire.

B. nutans, Schreb.

Heaths; sandy ground among bushes, etc. April, May. Wychwood Forest; Shotover Hill; Buckland, Berks; near Cumnor, Mr. Holliday. A moorland species, rare here.

B. carneum, Linn.

Moist banks in clay soil. March, April. By the Windrush near Minster Lovell; Godstow; Shotover Hill and Plantations; Bullingdon; near Stow Wood; Sandford Lasher, etc.

B. albicans, Wahl.

Wet banks and ditches, dripping rocks. May. Very rare here, and barren. Shotover Hill, 1858, but destroyed since. Stone embankment in Ch. Ch. Meadow, 1883; detected by Mr. Garnsey.

B. pendulum, Hornsch.

Walls, rocks, gravelly banks, etc. Sometimes with *B. caespitium*; rare here. May. Banks of the Canal and Cherwell in a few places, growing among stones and turf, always sparingly.

B. inclinatum, Swartz.

Walls, banks, decaying trunks of trees. May. Roadside between Gosford and Weston; near Heyford; decaying willow by the Cherwell near Sparsey Bridge; walls at Coombe; side of railway between Witney and Bampton, growing near *Tortula fallax*.

B. uliginosum, Bruch.

Wet places, near rills, etc.; rare. July. Field by the Cherwell near Park Town, 1860, H. B. Near Cumnor, 1861, Mr. Holliday.

B. intermedium, W. & M.

Old walls, sandy banks, etc. June to December. Rare here; shady old wall at Rose Hill, with *B. capillare* and *Trichost. rubellum*, 1860. North side of Shotover Hill, scarce; 1883.

B. bimum, Schreb.

Marshy places, bogs, etc. May, June. Bogs at Bullingdon, Headington Wick, and Stow Wood; old timber in the Cherwell near King's Mill.

B. cuspidatum, Sch.*B. binum*, var. *cuspidatum*, Wils.

Shady walls in damp situations; rare. June. Side of the Canal near Yarnton, 1861. A critical and difficult species.

B. torquescens, Br. & Sch.

Shady walls, banks, and rocks; rare. May, June. Bridges over the Canal near Wolvercote and Kirtlington, scarce. Very like *B. capillare*, but leaves scarcely twisted; inflorescence different.

B. erythrocarpum, Schwg.*B. sanguineum*, Ludw.

Sandy banks, heathy ground; rare. June, July. North side of Shot-over Hill with *B. turbinatum*, very sparingly, 1883. This again is a species of the moorlands.

B. murale, Wils.

Limestone walls and banks; rare. May, June. Banks of the Canal in two or three spots between Oxford and Kirtlington; old walls at Wheatley; Cumnor and Hincksey, Berks. The deep red or dark purple capsules at once distinguish it from *B. caespiticium*, and it is somewhat smaller in all its parts.

B. atropurpureum, W. & M.

Walls, banks, roadsides; frequent. April. Wychwood Forest; Witney; Islip; Noke; Elsfield; Ifley; Bessilsleigh, Cumnor, and Hincksey, Berks. Smaller and earlier than *B. murale*.

B. caespiticium, Linn.

Walls, roofs, banks; common. April, May. Sometimes takes possession of a length of wall, when its numerous bright red fruitstalks are very conspicuous in the spring sunshine. Curious varieties now and then occur, resembling other species rather than ordinary *caespiticium* in general aspect.

B. argenteum, Linn.

Walls, roofs, banks, etc.; common. November. Var. *majus*, rain spout, Friar's Entry, 1860. Easily distinguished by its silvery-green colour.

B. capillare, Linn.

Walls, rocky banks, sides of woods, trunks of trees, thatched roofs; common. May. Like other common species varying in size and aspect, according to situation. A thatched barn may sometimes be seen covered with it, and it then has a very striking appearance.

B. pallens, Swartz.

Wet banks and near springs or ditches. July. Rare with us. By the river near Godstow, and in the Canal bank in two or three places,

barren; Shotover Hill in fine fruit. Foliage usually of a fine rosy-pink colour.

***B. turbinatum*, Hedw.**

Wet gravelly and sandy ground, and old peat-pits where the soil has been dug; rare. May, June. Bullingdon Bogs, 1858, 1868, but now nearly destroyed; Shotover Hill, fine. Near the Hincksey Rifle-butts. Foliage as red as in the last.

***B. pseudotriquetrum*, Hedw.**

Bogs, wet moors and banks. June, July. Rare here, preferring more mountainous regions. Headington Wick; Bullingdon; Wychwood; Weston, Mr. Holliday. A robust dark-hued species, more frequent amongst the mountains. Very variable in size, etc.

***B. roseum*, Schreb.**

Shady banks in open woods and heaths; rare. Winter. Stockley Wood; Singe Wood near Hailey; Stow Wood; Headington Wick Copse; Shotover Hill. No fruit, but the stellated clusters of leaves sometimes an inch in diameter. One of the most remarkable of our mosses: it has several close allies in the tropics, forming a very well marked group.

***MNIUM*, Linn.**

***M. affine*, Bland.**

Wet heaths, bogs, springy places. May. Stream in Wychwood Forest with abundant perigonia; bogs under Bullingdon and Headington Wick, and a few other places, but without fruit.

***M. cuspidatum*, Hedw.**

'Shotover Plantations' (about 1790), Sibth. Flor. Oxon., but probably his plant was the next species, not then well discriminated. Buckland, Berks, 1860, 1862, J. S. Milne and H. B. I have not found it yet in Oxon.

***M. rostratum*, Schwg.**

Shady banks, borders of woods and rocks. April. Shotover Plantations, 1860, 1865. Headington Wick; near Watereaton.

***M. undulatum*, Hedw.**

Moist shady grassy banks and sides of woods, frequent but rare in fruit. April. Cornbury Park; near Hailey and Witney; Ditchley; Watereaton Copse; Shotover Hill and Plantations; Stokenchurch Woods; Cumnor and Pusey, Berks.

***M. hornum*, Linn.**

Shady banks, woods and copses. April. Wychwood Forest; Shotover Hill and Plantations; Stokenchurch Woods. Bagley Wood, Wootton, and Cumnor, Berks. Its rarity near Oxford is remarkable.

M. punctatum, Hedw.

Wet banks, drains in woods, on clay or heavy soil ; very rare in Oxon. February, March. Headington Wick Copse ; Shotover Plantations ; Bagley Wood and Wytham, Berks.

AULACOMNION, Schwg.**A. palustre**, Linn. (*Bryum*.)

Turfy bogs and wet grassy heaths. May, June. Wychwood Forest ; north side of Shotover Hill (1860, 1870, 1884) ; near Wootton and Childs-well Farm, Berks. Scarce and barren ; apparently approaching extinction as drainage progresses.

TETRAPHIDEÆ.**TETRAPHIS**, Hedw.**T. pellucida**, (Linn.) *Georgia*, Ehrh.

About roots of trees and decaying stumps in woods and rocky banks. Rare. August. On old stumps of trees, Shotover Plantations (Sibth. 1790), Shotover Hill (H. B. 1860), but scarcely to be found now. Should occur in some of the woods to the South. In Berks, near Virginia Water, fine.

POLYTRICHIDÆ.**ATRICHUM**, Beauv.**A. undulatum**, Linn. (*Bryum*.)

Common in shady woods and damp thickets, especially over clay ; fruit abundant. November, December. Wychwood ; Ditchley ; Noke ; Shotover ; Grave Hill Wood ; Nuneham ; Goring, etc.

POGONATUM, Beauv.**P. nanum**, Neck. (*subrotundum*, Huds.)

Moist shady banks on sand and gravel. November. Ramsden Heath ; Eynsham Demesnes ; Shotover Hill ; Bagley Wood. The length of the fruitstalk varies greatly.

P. aloides, Hedw.

In similar situations to the last, often growing with or near it. November, December. Wychwood Forest ; Shotover ; near Henley and Nettlebed ; Bagley Wood. Var. *minus*, Bagley Wood and near Wootton.

POLYTRICHUM, Linn.**P. formosum**, Hedw.**P. attenuatum**, Menz.

In woods and on shady heaths. May, June. Wychwood Forest ; Coggs Wood ; Bladon ; Stow Wood ; Shotover ; Coombe Wood ; Nuneham ; near Stokenchurch ; Nettlebed and Goring. Frequent in Berks also.

P. juniperinum, Hedw.

Gravelly soil in woods, heaths, etc. April, May. Ramsden Heath ; Shotover ; Bagley Wood and Wootton, Berks.

P. piliferum, Schreb.

In similar places and often found growing near the last species. Rare here. April, May. Wychwood ; Shotover ; Bagley and Wootton. These two are plants of the moors.

P. commune, Linn.

Bogs, wet moors and peaty places. June. Formerly fine at Shotover, but destroyed by drainage about 1861. Wychwood Forest, scarce, 1870, 1875. Near Wootton, Berks, 1863, 1871, with Sphagnum. A species already or soon to be lost to us.

Division II. PLEUROCARPI ; *stems prostrate or creeping, pinnately branched ; fruit lateral on the stem or branches.*

FONTINALIDÆ.**FONTINALIS**, Dill.**F. antipyretica**, Linn.

Frequent in the Thames, Cherwell, Windrush and other streams, often attaining a great size but apparently always barren in running water, fruiting only in lakes and ponds. June.

CRYPHIDÆ.**CRYPHEA**, Mohr.**C. heteromalla**, Hedw.

Trunks of trees, not very common. April. Wychwood ; Kirtlington ; Eynsham ; Noke ; edge of Bullingdon Green ; Nuneham ; near Stokenchurch ; in Pusey Wood, and very fine on laurels at Buckland, Berks.

LEUCODONTIDÆ.**LEUCODON**, Schwg.**L. sciuroides**, Linn. (*Hypnum*.)

Trunks of trees, rarely on stones ; barren ; not unfrequent on hedge-row elms and other trees ; stone walls near Witney and Wheatley ; willows by the Cherwell, and near Standlake ; seeming never to bear fruit here.

ANTITEICHIA, Brid.**A. curtispindula**, Linn. (*Hypnum*.)

Rocks, walls, and trunks of trees, chiefly in mountainous districts, rare here. Stokenchurch Woods, 1861. Bagley Wood, plentifully fruiting,

Mr. Baxter about 1845, but in 1860 and 1862 it had almost disappeared, and I could only find a few barren patches, adhering closely to the trunks of trees.

NECKERADÆ.

NECKERA, Hedw.

N. pumila, Hedw.

Trees in woods, not common; fruit rare. October, November. Wychwood Forest; Orchards, Witney, Mr. Westell; Woods near Henley, Stokenchurch and Wycombe, but always scarce.

N. crispa, Linn.

Mountain rocks in calcareous districts, and about trees in woods. April. Rare here. Woods near Goring, Streatley, Henley and Stokenchurch; barren.

N. complanata, Linn.

In hedges and woods, about roots of trees, stones and walls, frequent but rarely fruiting. November, December. Fruit in plenty at Tully-bushes in Wychwood Forest, 1872; Stokenchurch Woods more scarce, 1862, 1866. Bagley Wood, Berks.

OMALIA, Brid.

(*Omalia*.)

O. trichomanoides, Schreb.

Borders of woods, about trees, etc. October, November. Wychwood Forest; Bruern Woods; Grave Hill Wood, Bicester; Copses near Godstow; Elsfield; Headington Wick; Stokenchurch. Though less common than the last it is more frequently found in fruit, owing to the monoicous inflorescence.

LESKIDÆ.

LESKEA, Hedw.

L. polycarpa, Ehrh.

About roots and trunks of trees, chiefly where liable to floods; fruiting copiously. June, July. Banks of the Thames, Cherwell, Windrush, Evenlode, etc. in various places.

ANOMODON, Hook.

A. viticulosus, Linn. (*Hypnum*.)

About the base of stone walls and trees in calcareous districts, frequent. Winter. Fruit rare. Wychwood; Langford Lane; Stanton St. John; Stokenchurch, near Cumnor, Berks.

THUIDIUM, Schpr.

T. tamariscinum, Hedw. (*Hypnum*.)

Woods and copses, abundant. Winter. Fruit rare. Stockley Wood; Watereaton Copse; Headington Wick Copse; near Henley.

T. abietinum, Linn.

Limestone banks, chalk-hills and mountain fir-woods ; rare and barren in Britain. Dillenius records it '*in collibus pone Hincksey*,' but I have sought it in vain thereabouts. Holton Stone Pits, 1865, 1873, 1885, in some plenty. Should be found on the chalk in the Chiltern country.

HYPNIDÆ.

CLIMACIUM, Brid.

C. dendroides, Linn. (*Hypnum*).

Bogs, marshes, wet moors and meadows. November. Near Bullingdon and Stow Wood ; between Buckland and Pusey. Scarce and barren, apparently dying out, like so many of our marsh plants.

THAMNIUM, Schpr.

T. alopecurum, Linn. (*Hypnum*).

Moist shady woods and copses, frequent and not rarely in fruit. Winter. When within reach of woodland streamlets it assumes very large size, and then is seldom fertile.

ISOOTHECIUM, Brid.

I. myurum.

(*H. curvatum*, Turn.)

Woods, not unfrequent. November, December. Wychwood Forest ; Bruern Woods ; Ditchley ; Grave Hill Wood, fine ; Stanton St. John ; near Watlington, Stokenchurch, and Henley.

HOMALOTHECIUM, Schpr.

H. sericeum, Linn. (*Hypnum*).

Trunks of trees, walls, very common. Winter. Fruit comparatively scarce and apparently mostly on stone.

CAMPTOTHECIUM, Schpr.

C. lutescens, Huds. (*Hypnum*).

Shady banks, limestone rocks and quarries, frequent, but rarely fruiting. November, December. Near Witney, in plentiful fruit ; near Stokenchurch ; Bagley Wood, a few capsules.

BRACHYTHECIUM, Schpr.

B. salebrosum, Hoffm. (*Hypnum*).

Grassy sandy banks, and on trees ; rare. November. Near Kirtlington and Woodstock, 1864 ; W. Holliday. Between Witney and Ducklington, 1870 ; F. Westell and H. B.

B. glareosum, Br. & Sch.

Grassy banks, woods, etc. November. Wychwood Forest; Coggs Wood; Stow Wood and Noke; Stokenchurch; Bagley and Pusey, Berks. Frequent, but never with fruit, hitherto.

B. albicans, Neck.

Sandy banks; thatched roofs; rare in fruit. November. Thatch at Witney, Hailey, Coggs, Eynsham, Asthalleigh; Botley; Headington, etc. Less frequent about Oxford and eastward than in the Witney district.

B. velutinum, L. (*Hypnum*.)

Woods and copses, hedges, etc., about old stumps. November, December to February. Wychwood; Stow Wood; Shotover, etc., etc. Frequent but never abundant.

B. rutabulum, Linn. (*Hypnum*.)

Banks, trees, walls, etc., common. Winter. Var. *longisetum*, Bulington; Bagley. Var. *robustum*, Shotover Hill; Bagley. Many forms occur, scarcely to be referred to definite varieties.

B. populeum, Hedw.

Trunks of trees and stones. Winter. Remarkably rare. One tree in Wytham Wood, 1859, H. B. Headington Copse, 1884, Mr. Garnsey.

EURHYNCHIUM, Schpr.**E. myosuroides**, Linn. (*Hypnum*.)

Isothecium, Bryol. Brit.

About trees in woods, and rocky banks. November. Wychwood Forest; Coggs Wood near Witney; Grave Hill Wood, Bicester; Stokenchurch.

E. striatum, Schreb. (*Hypnum*.)

Woods and shady banks, frequent but not common in fruit. November, December. Wychwood Forest; Coggs Wood; Grave Hill Wood; Headington Wick; Noke Wood; near Watlington, Stokenchurch, and Henley. Cumnor Hill and Pusey Wood, Berks.

E. crassinervium, Tayl.

Stones, walls and rocks in shady places. November. Hanwell near Banbury; Asthalleigh; Witney; about Sandford Lasher. Scarce, and without fruit.

E. piliferum, Schreb.

Grassy woods, copses and shady banks. November. Wychwood Forest; Headington Wick; near Watereaton; Stokenchurch Woods; etc. Not unfrequent, but barren whenever I have met with it. Fruit should be found in the Chiltern woods.

E. speciosum, Brid.

Stones and trunks of trees near water. November. Bank of the Windrush, Witney; Mr. Westell. Canal banks between Oxford and Heyford; side of walk in Christ Church Meadow; near Iffley, Sandford, and Nuneham. Rare. A handsome species, but liable to be spoiled by mud left by the water; else conspicuous by the large bright green shining foliage.

E. Swartzii, Turn.

E. praelongum, Schpr. (non Dill. !)

Hedges and shady banks. November. Frequent, but rarely in fruit, seeming to flourish most over clay.

E. praelongum, Dill.

(*Hypnum*) Tab. xxxv. 15.

Wood and copses, about trees, etc. November. A common species, but fruit somewhat scarce; abundant at Stockley and Tully-bushes in Wychwood Forest, 1870 and 1873. *H. Stokesii* Turn. seems only a large form of this.

E. pumilum, Wils. (*Hypnum*.)

Shady hedge-banks and rocky places, rare. Winter. Near Cuddesdon. Copse near Bagley Wood. Very scarce here, or overlooked from its smallness.

REYNCHOSTEGIUM, Schpr.**E. tenellum**, Dicks.

Stone walls, rocky banks, not common. November, December. In several places about Woodstock, Mr. Holliday; near Witney; Asthal-leigh; Binsey Lane; Sandford; near Stokenchurch.

E. Teesdallii, Sm.

Moist shady rocks, stones near water. April, May. By the Windrush, between Witney and Minster Lovell, Mr. Westell; Bayswater Mill; Sandford Lasher; Heyford. Very scarce in each instance.

E. confertum, Dicks.

Stones, walls, trees in hedge-banks, frequent. November, December. Blenheim Park; Wychwood Forest; Iffley; Shotover; Stow Wood and Noke; Radley and Buckland, Berks, etc.

E. murale, Hedw. (*Hypnum*.)

Stones and walls, principally in limestone districts. November, December. Great Tew; Witney; Wolvercote; Iffley; Headington; Elsfield. Not unfrequent; fruiting abundantly.

B. rusciforme*, Dill.Hypnum ruscifolium*, Bryol. Brit.

Stones in or by water. November, December. River Windrush; Canal banks; Iffley; etc., frequent; fine at Bayswater Mill, attaining a great size and fruiting copiously.

FLAGIOTHECIUM, Schpr.***F. denticulatum*, L. (*Hypnum*.)**

Sides of woods, copses, hedge-banks. June, July. Frequent, but apt to be overlooked till winter has cleared away the foliage from the bushes, when its numerous old capsules become conspicuous. The foliage varies in brightness, and some states are difficult to distinguish from the following species.

***F. sylvaticum*, L.**

Woods at roots of trees, etc., rare. Autumn. Singe Wood near Witney; 1882. Unless I have overlooked it this is very rare with us.

***F. undulatum*, L.**

Open woods, copses, sandy heaths. April. Near Nettlebed; Buckland, Berks. Much larger and more conspicuous than the two foregoing, and apparently very rare in these counties.

AMBLYSTEGIUM, Schpr.***A. serpens*, Linn.**

Trees, walls, banks, common. April. Though small generally conspicuous by its numerous capsules.

***A. radicale*, Beauv.**

Wet and shady places, rare. April. Shotover, on dead sticks by the ponds, scarce.

***A. irriguum*, Wils.**

Stones near water, rare. April. Near Sandford Lasher, 1861. A few small patches only.

***A. riparium*, Linn.**

Stones, trees, and old timber by water, etc. April. Frequent, and varying much; a large *Fontinalis*-like form occurs in wet grassy spots, which seems never to produce fruit.

HYPNUM, Dill., Linn.***H. Sommerfelti*, Myrin.*****H. polymorphum*, Wils.**

Walls, etc. in limestone districts, rare. May. Asthalleigh, in company with *serpens* and *molluscum*, *Anom. viticulosus*, etc., 1869, 1871.

***H. chrysophyllum*, Brid.**

Grassy stony places, chalk hills, etc. May. Wychwood; near Minster Lovell; Heyford; Blenheim; Holton; Shotover; Lewknor; Stokenchurch. No fruit.

***H. stellatum*, Schreb.**

Bogs and wet grassy places; fruit rare. May. Wychwood; Weston-on-the-Green; Headington Wick; Bullingdon Bog, formerly very fine and plentiful, but now scarce, and threatened with extermination.

***H. aduncum*, Hedw.**

Wet grassy places and marshes. May, June. By the roadside between Witney and Woodstock; Weston-on-the-Green; Port Meadow; Marston; Bullingdon; Horsepath; south side of Shotover; ponds near Bagley Wood; Pusey and Buckland, Berks. When grown to large size it is *H. Kneiffii* of Bruch and Schimper. It varies according to the depth of water from 3 inches to 2 feet in length. The Marston locality indicates this as Sibthorp's *H. fluitans*.

***H. fluitans*, Dill., Hedw.**

Marshes, peaty ditches, bogs, pools, etc. May. Between Gosford and Bicester; Watereaton; in several places near Woodstock, Mr. Holliday; about a pool at Holton Stone Pits. Less frequent with us than the last species.

***H. filicinum*, Linn.**

Marshy ground, wet banks, springs, etc. April. Extremely variable; formerly very fine and fertile at Bullingdon, but otherwise rare in fruit.

***H. commutatum*, Hedw.**

Wet calcareous places, rocks and bogs. April. Near the spring in Wychwood Forest, on dripping rocks; bogs near Stow Wood and Headington Wick, but without capsules. Probably this is Sibthorp's *H. Crista-castrensis*. The true one is not likely to occur here.

***H. falcatum*, Brid.**

Bogs and wet places in calcareous districts. May, June. Wychwood Forest; Canal bank; bogs at Stow Wood, Headington Wick and Bullingdon; formerly fine and abundant at the last, but now nearly destroyed, like *H. stellatum* with which it grew.

***H. cupressiforme*, Dill.**

Woods, trees, thatch; very common. November, December.

Var. *filiforme*, common on tree trunks; fruit rare.

Var. *ericetorum*, Wychwood; Shotover; Wootton, etc.

Var. *lacunosum*, on the ground; Wychwood; Headington Wick; Goring; Henley, etc.

Var. *resupinatum*, (Wils.) Wychwood; Grave Hill Wood; Bagley Wood, etc.; rare in fruit, as all the varieties are.

H. arcuatum, Lindb. (not of Hedw.)

H. pratense, Wils. Bryol. Brit. (not of Koch.)

H. Patientie, Lindb.

Moist banks, wet drains in woods and pastures; rare. Summer. On heavy loam by the side of a ride in Coggs Wood near Witney; barren but somewhat plentiful. This is larger than any form of *cupressiforme*, with leaves not tapering and acuminate; it seems to be a summer moss, here, dying down in autumn, but Mr. Saunders finds it in winter in South Bedfordshire, perhaps in a warmer situation. The true *H. pratense* of Koch has not been found in Britain, so far as I have been able to ascertain, and the present plant only in a barren state, though it occurs in several counties.

H. molluscum, Hedw.

Hilly ground, stone walls, woods and banks. October, November. Common, but not often fruiting.

H. palustre, Linn.

Stones in rivulets and wet banks, etc. Rare here. May. Banks of the Canal in several places; stone-built drain near the church at Ducklington, Mr. Westell; Hanwell near Banbury.

H. cordifolium, Hedw.

Wet ditches and grassy places. April, May. Rare; between Shotover and Headington Quarry; ponds near Bagley Wood, with *H. aduncum*.

H. cuspidatum, L.

Wet spots in waste ground, bogs, marshes; very common. May. Fruit at Wychwood, Bullington, Bagley Wood and Pusey; but rare.

H. Schreberi, Willd.

Woods, shady banks, heaths; rare in fruit. October, November. Wychwood; Shotover; Coombe Wood; Henley; Goring; Nettlebed, etc. No capsules, and they seem to be rare even in the north.

H. purum, Linn.

Grassy banks, woods, lawns, etc.; common. October. Fruit in shady places by woods, rare; Coombe Wood; near Watlington and Stokenchurch; Bagley Wood.

HYLOCOMIUM, Schpr.

Hypnum, auctt.

H. splendens, Dill. Hedw.

Grassy banks in woods and heaths. April. Wychwood; Coggs Wood; Shotover; Stow Wood; Stokenchurch; Buckland, Berks, etc. This seems not to produce fruit in these counties very freely, and only in the hilly woods about Wychwood and the Chilterns.

H. brevirostre, Ehrh.

Woods, chiefly in mountainous districts. October, November. In the woods about Stokenchurch, Henley, Wycombe, and Marlow, occasionally, but not very common. Sometimes growing with *Eurh. striatum* which it much resembles in general aspect, and is hence liable to be overlooked.

H. squarrosus, Linn.

Woods, banks, lawns; common. November, December. Fruit rare. Stockley Wood near Asthallenge; Coombe Wood near Cuddesdon; Stokenchurch; Bagley and Pusey, Berks.

H. triquetrum, Linn.

Woods and shady banks. November, December. Fruit rare. Wychwood Forest; Grave Hill Wood near Bicester; Watereaton Copse; Headington Wick; Stokenchurch; near Henley.

H. loreum, Dill.

Woods, chiefly in mountainous districts; not common in fruit. November, December. Near Stokenchurch, Goring, Henley, and Wycombe, occasionally, but capsules very scarce. This does not seem to occur in Wychwood Forest. It is fine in Gloucestershire.

SPHAGNACEÆ.

Peat Mosses. These form a very distinct tribe; abounding in mountain regions, where they often grow in wide beds and cover extensive bogs which they eventually fill; they scarcely exist now in these counties except as here and there in small quantities, the survivors of a bygone time and different state of things.

SPHAGNUM, Dill.**S. acutifolium**, Ehrh.

Powder Hill Copse near Cumnor, scarce; amongst grass under shade of bushes, 1863. Vanishing or vanished since.

S. recurvum, Beauv.

S. Mougeotii, Sch. *S. intermedium*, Ehrh.

Wychwood Forest, near Ramsden Heath; bog near Foxcombe Hill, Wootton, Berks, growing with *S. cymbifolium* and *Polytrichum commune*.

S. cymbifolium, Dill., Ehrh.

Wychwood Forest, near Ramsden Heath; in Berks, fine near Foxcombe Hill, with *recurvum*, 1863, 1871; Bagley Wood and Powder Hill Copse, 1870, 1876, a dwarfish state.

S. subsecundum, Nees.*S. contortum* var. *subsecundum*, Wils.

Ramsden Heath, 1870, 1879. Coggs Wood and near it towards Eynsham 1880; Powder Hill Copse, scarce; about Virginia Water, plentiful. The small pale form, usual on dry moors and heaths, as for instance in the New Forest. In or near water it becomes much larger and runs into numerous varieties of form and diversities of colour.

HEPATICÆ.**SCALE-MOSSES and LIVERWORTS.**

Division I. **FOLIOSÆ**; *stem and leaves mostly distinct. Capsule splitting into four valves.*

ALICULARIA, Corda.**A. scalaris**, Schrad.

Banks and wastes; common in mountains. Spring. Rare here. Wychwood Forest, 1879; Coggs Wood, 1882.

PLAGIOCHILA, Dumort.**P. asplenioides**, L.

Damp woods and copses, frequent and sometimes very large, but always barren; Wychwood; Shotover; Headington Wick Copse; Stokenchurch, etc. Fruit occurs in the Gloucestershire hills, and may yet be found in the Stokenchurch region.

SCAPANIA, Dum.**S. undulata**, Dill., Nees.

Bogs and streamlets chiefly in mountains. Spring. Small stream at Coggs Wood, 1880, 1882. A short, broad, bright green form, very different in aspect from the usual mountain states.

S. nemorosa, Linn., Nees.

Shaded banks, sides of woods, etc. Spring. Shotover Hill; Stokenchurch; Buckland, Berks.

S. irrigua, Nees.

Wet spots in woods, swamps, peat-bogs. Spring. Singe Wood near Hailey, January 1880, F. Westell and H. B. (N.B. The figure in 'Science Gossip' under this name is quite incorrect.)

JUNGERMANNIA, Linn.**J. albicans**, Linn.

Banks on sandy or loamy soil. Spring. Less common here than in most counties; Wychwood Forest; Ramsden Heath; Grave Hill Wood; Shotover; Bagley Wood, Berks.

J. crenulata, Sm.

In similar situations to the last. April. Ramsden; Shotover Hill in fruit. Var. *gracillima*, (Sm.) *J. tenerrima*, Raddi; Shotover Hill; Copses adjoining Bagley Wood.

J. sphærocarpa, Hook.

Banks and woods, not common. April. Singe Wood; Coggs Wood; Shotover Hill; Stokenchurch; Buckland, Berks.

J. ventricosa, Dicks.

Grave Hill Wood near Bicester; Stokenchurch; Buckland Park, Berks.

J. pumila, With.

Shaded banks, in light soil; rare. April. North side of Shotover Hill, 1869, 1875.

J. bicuspidata, L.*Cephaloxia*, Spruce.

Shaded banks, woods, etc. Spring. Wychwood Forest; Singe Wood; Stokenchurch; near Pusey, and in Windsor Great Park, Berks.

LOPHOCOLEA, Dum.**L. bidentata**, Linn.

In damp shady woods and copses. March, April. Fruit occasionally abundant; Stockley Wood; Grave Hill Wood; Shotover; Elsfield; Wootton, Cumnor, and Tubney, Berks.

L. heterophylla, Schræd.

Stockley Wood near Asthalleigh, 1869; Coggs Wood, 1883.

CALYPOGEIA, Corda.**C. Trichomanis**, L. (*Jungerm.*)

Woods and shaded banks; rare. April. Shotover Plantations, 1790, *Sibthorp*; Shotover Hill and Plantations, 1865, 1870; Singe Wood near Hailey, 1881; H. B.

RADULA, Dum.**R. complanata**, L. (*Jungerm.*)

Trunks of trees, with mosses, etc.; frequent. April. Near Woodstock; Witney; Hailey; Watereaton; Stow Wood; Noke; Shotover, etc. Often found growing with *Neckera complanata*.

MADOTHECA, Dum.**M. platyphylla**, L. (*Jung.*)

Shady old walls, sometimes in large patches. Spring. Asthalleigh;

Minster Lovell; Noke; Elsfield; Shotover; Stokenchurch; Hincksey, etc.

FRULLANIA, Raddi.

F. dilalata, L. (*Jung.*)

Frequent on trunks of trees, especially in shady woods with *Orthotr. Lyellii*, etc., forming conspicuous purplish brown or blackish patches, fruiting not rarely. April.

METZGERIA, Raddi.

M. furcata, Nees.

Jungermannia, L.

Trunks of trees, not rare. Spring. Near Banbury; Rousham; Yarn-ton; Shotover; Stokenchurch, etc. Var. *æruginea*, Stokenchurch, Goring, and Streatley, on beech trunks.

BLASIA, Mich.

B. pusilla, L. (*Jung.*)

Wet places, by rills, etc. Spring. On Shotover Hill; Headington Wick. Rare here from the absence of suitable localities.

PELLIA, Raddi.

P. epiphylla, L.

On the ground in wet places, bogs, etc. Spring. Bullingdon Bog; Headington Wick; Shotover; Bagley Wood.

ANFURA, Dum.

A. pinguis, L. (*Jung.*)

Boggy places among grass and mosses. Spring. Bullingdon; Headington Wick; near Cumnor.

A. multifida, Dum.

North side of Shotover Hill, 1866, 1880; Harpsden near Henley, 1882.

The last five species form a frondose subsection and a link with the next division.

Division II. **MARCHANTIACEÆ**; *Liverworts*. *Plants frondose, without distinct stem or leaves, capsules collected in a long-stalked receptacle, not regularly 4-valved.*

MARCHANTIA, Linn.

M. polymorpha, L.

Moist banks, damp earth and shady places; common and variable. Spring. A large form at Headington Wick growing on the ground between large tussocks of *Carex paniculata*, 1859 and 1867.

PEGATELLA, Raddi.

P. conica, Linn. (*Marchantia*.)

By springs, ditches, etc.; rare. April. Shotover Plantations, 1790, Sibth. 1860, H. B. Wychwood, 1870.

LUNULARIA, Michx.

L. vulgaris, Michx.

Damp shady banks, etc. Spring. Wychwood; Shotover, etc. No fruit.

RICCIA, Linn.

R. glauca, Linn.

Damp ground, gardens, fields, etc. Spring. Southleigh; Botanic Gardens; Sibthorp, *Flor. Oxon.*

One or two other Ricciæ should be found, but are apparently at least not common, for I have not met with them hitherto.

Four species recorded by Sibthorp as growing at Shotover about 1790 seem no longer to exist there; I have sought them without success at various times since 1856. These are

Chiloscyphus polyanthus,
Saccogyna viticulosa,
Lepidozia setacea, and
L. reptans.

FUNGI.

THIS list of Fungi is drawn up from the following sources. Firstly, Sibthorp's Flora, which enumerates 231 species. There is great difficulty in identifying some of these with the modern names. Quotations from this list are abbreviated to *Sib.* Secondly, Beesley's List of Fungi found round Banbury, this includes the Fungi found by Gulliver as well as those discovered by Beesley himself; abbreviated *B.* Thirdly, Baxter's MSS. These are Fungi found around Oxford; abbreviated *Bz.* Fourthly, a valuable list of Hymenomycetous Fungi found on the Chilterns and about Crowell by Miss Beatrice Taylor during the last six years. These are quoted as *T.* My own scanty notes are marked *D.* The list is arranged according to Cooke's Handbook of British Fungi.

Agaricus (Amanita) vaginatus, Bull.

B. T.

vernus, Bull. *T.*

mappa, Batsch. *Sib.*

phalloides, Fr. *Sib. T.*

muscarius, L. *Sib.*

pantherinus, D C. *T.*

rubescens, P. *T.*

excelsus, Fr. *T.*

strobiliformis, Fr. *T.*

Agaricus (Lepiota) procerus, Scop.

Sib. B.

gracilentus, Kr. *T.*

excoriatus, Schœff. *Sib. T.*

mastoideus, Fr. *T.*

cristatus, Fr. *B. T.*

vittadini, Mor. *T.*

granulosus, Batsch. *T.*

Agaricus (Armillaria) melleus,

Vahl. *Sib. B.*

mucidus, Fr. *B.*

Agaricus (Tricholoma) sejunctus,

Sow. *T.*

spermaticus, Fr. *T.*

ustalis, Fr. *T.*

rutilans, Schœff. *T.*

columbetta, Fr. *T.*

vaccinus, P. *T.*

terreus, Schœff. *T.*

Agaricus (Tricholoma) saponaceus,

Fr. *B. T.*

tigrinus, Fr. *Sib.*

sulphureus, Bull. *T.*

albus, Fr. *T.*

grammopodius, Bull. *T.*

melaleucus, P. *T.*

ionides, Bull. *Sib.*

brevipes, Bull. *T.*

carneus, Bull. *T.*

cuneifolius, Fr. *T.*

Agaricus (Clitocybe) nebularis,

Batsch. *T.*

odorus, Bull. *Sib. T.*

cerussatus, Fr. *T.*

var. difformis. *T.*

dealbatus, P. *B. T.*

fumosus, P. *T.*

fragrans, Sow. *B. T.*

infundibuliformis, Schœff. *Sib.*

B. T.

geotrupus, Bull. *T.*

flaccidus, Sow. *T.*

cyathiformis, Fr. *Sib. T.*

brumalis, Fr. *T.*

metachrous, Fr. *T.*

laccatus, Scop. *B. T.*

Agaricus (Pleurotus) ulmarius,

Bull. *Sib. T.*

Agaricus (Pleurotus) subpalmatus,
Fr. T.
Agaricus (Collybia) radicans,
Relh. Sib. B. T.
velutipes, Curt. Sib. B. T.
butyraceus, Bull. T.
confluens, P. T.
ingratus, Schum. T.
conigenus, P. T.
acervatus, Fr. T.
dryophilus, Bull. T.
esculentus, Jacq. T.
clavus, Bull. B.
candicans. T.
Agaricus (Alycena) purus, P. B. T.
luteo-albus, Bolt. T.
polygrammus, Bull. T.
lacteus, P. T.
galericulatus, Scop. B. T.
pauperculus, Berk. T.
temuis, Bolt. T.
filipes, Bull. T.
acicula, Schöff. T.
corticola, Schum. B.
epipterygius, Scop. T.
alcalinus, T.
Agaricus (Omphalia) umbelliferus,
L. Sib.
griseus, Fr. T.
fibula, Bull. B.
Agaricus (Volvaria) parvulus,
Wein. T.
Agaricus (Pluteus) cervinus, Schöff.
T.
Agaricus (Entoloma) sinuatus, Fr.
T.
Bloxami, B & Br. T.
clypeatus, L. Sib.
sericellus, Fr. T.
ameides, B. & Br. T.
nidosus, Fr. T.
Agaricus (Clitopilus) prunulus,
Scop. T.
Agaricus (Claudopus) variabilis, P.
T.
Agaricus (Leptonia) lampropus,
Fr. T.
incanus, Fr. T.
asprellus, Fr. T.
Agaricus (Nolanea) pascuus, P. T.
Agaricus (Pholiota) radicosus, Bull.
T.
aurivellus, Batsch. T.

Agaricus (Pholiota) adiposus, Fr.
T.
spectabilis, Fr. Sib.
mutabilis, Schöff. Sib. T.
Agaricus (Hebeloma) mesophæus,
Pers. T.
sinapizans, Fr. T.
crustuliniformis, Bull. Sib. T.
fastibilis, Fr. B.
longicaudis, P. T.
geophyllus, Sow. B. T.
incarnatus. T.
obscurus, P. T.
squarrosus, Müll. B.
rimosus, Bull. B. T.
auricomus, Batsch. T.
hiulcus, Fr. T.
pyriodorus, P. T.
concentricus. T.
flocculosus, Berk. T.
Agaricus (Crepidotus) mollis,
Schöff. T.
Agaricus (Naucoria) melinoides,
Fr. B. T.
semiorbicularis, Bull. T.
Agaricus (Galera) tener, Schöff.
Sib. T.
Agaricus (Tubaria) furfuraceus, P.
T.
Agaricus (Psalliota) campestris, L.
Sib. B. T.
var. sylvicola. T.
rufescens. T.
exannulatus. T.
hortensis. T.
arvensis, Schöff. Sib. B. T.
Agaricus (Stropharia) æruginosus,
Curt. Sib. B. T.
obturatus, Fr. T.
squamosus. T.
stercorarius, Fr.
semiglobatus, Batsch. B. T.
Agaricus (Hypholoma) sublateri-
tius, Fr. T.
epixanthus, Fr. T.
dispersus, Fr.
fascicularis, Huds. Sib. B. T.
velutinus, P. T.
appendiculatus, Bull. T.
Agaricus (Psilocybe) spadiceus,
Schöff. T.
clivensis, Berk.
ericæus, Pers. T.

- Agaricus (Psilocybe) fæniseei*, P. T.
Agaricus (Psathyra) corrugis, P.
Agaricus (Panæolus) separatus, L. B.
finiputris, Bull. B. Sib.
Agaricus (Psathyrella) hiascens, Fr. T.
disseminatus, Fr. B.
Coprinus comatus, Fr. B. T.
micaceus, Fr. Sib. B. T.
plicatilis, Fr. B.
ephemerus, Fr. B.
atramentarius, Fr. T.
Cortinarius (Phlegmacium) multiformis, Fr. T.
purpurascens, Fr. T.
castaneus, Fr. Sib.
glaucoopus, Fr. Sib. (?)
fulgens, Fr. T.
cumatilis, T.
Cortinarius (Myzacium) collinitus, Fr. T.
elator, Fr. T.
Cortinarius (Inoloma) sublanatus, Fr. T.
violaceus, Fr. B.
Cortinarius (Dermocybe) ochroleucus, Fr. T.
tabularis, Fr. T.
caninus, Fr. T.
sanguineus, Fr. T.
cinnamomeus, Fr. T.
Cortinarius (Telamonia) bulbosus, Fr. T.
hinnuleus, Fr. T.
hemitrichus, Fr. T.
Cortinarius (Hygrocybe) castaneus, Fr. T.
leucopus, Fr. T.
Lepista nuda, Bull. T.
personata, Fr. T.
Paxillus involutus, Fr. T.
Hygrophorus eburneus, Fr. T.
ceraceus, Fr. Sib.
hypothejus, Fr. T.
olivaceo-albus, Fr. T.
Virgineus, Fr. Sib. T.
coccineus, Fr. B. T.
Colemannianus, Blox. T.
conicus, Fr. B. T.
psittacinus, Fr. Sib. T.
Gomphidius viscidus, Fr. Sib. T.
stillatus, Strauss. T.
Gomphidius ceraceus, T.
Lactarius insulsus, Fr. T.
blennius, Fr. T.
trivialis, Fr. T.
widus, Fr. T.
pyrogalus, Fr. T.
plumbeus, Fr. T.
acris, Fr. Sib. T.
zonarius, Fr. Sib.
piperatus, Fr. Sib.
vellereus, Fr. B. T.
deliciosus, Fr. S. T.
pallidus, Fr. T.
cyathula, Fr. T.
serifluis, Fr. T.
fuliginosus, Fr. T.
mitissimus, Fr. T.
camphoratus, Fr. T.
Russula nigricans, Fr. T.
delica, Fr. T.
heterophylla, Fr. T.
emetica, Fr. B. T.
sardonica, Fr. T.
virescens, Fr. T.
cyanozantha, Fr. T.
foetens, Fr. B. T.
ochroleuca, Fr. T.
fragilis, Fr. T.
alutacea, Fr. T.
lutea, Fr. T.
chamæleontina, Fr. T.
felleus, T.
Cantharellus cibarius, Fr. Sib. Bx. B. T.
aurantiacus, Fr. B. T.
tubæformis, Fr. T.
lobatus, Fr. B.
Marasmius porreus, Fr. T.
oreades, Fr. Sib. B. D.
peronatus, Fr. T.
erythropus, Fr. T.
ramealis, Fr. Sib. Bx.
rotula, Fr. B. Bx.
androsaceus, Fr. Bx. T.
urens, Fr. T.
Sentinus tigrinus, Fr. Sib.
cochleatus, Fr. T.
Panus torulosus, Fr. T.
stypticus, Fr. T.
Schizophyllum commune, Fr. Bx.
Boletus luteus, L. Sib. B. T.
laracinus, Berk. T.
granulatus, L. Sib. (?) T.

- Boletus chrysenteron*, Fr. Sib. (!) T.
edulis, Bull. Sib. Bz. T.
scaber, Fr. Sib. B. T.
Satanas, Lenz. T.
luridus, Fr. B. T.
olivaceus, Schöff. Sib.
erythropus, P. T.
flavus, With. B. T.
variæcolor, B. & Br. T.
impolitus, Fr. T.
castaneus, Bull. B.
subtomentosus, L. Sib.
cyaneus, Bull. Sib.
Polyporus squamosus, Fr. Sib. B.
Bz. T.
varius, Fr. Bz. T.
lucidus, Fr. B.
intybaceus, Fr. B.
sulfureus, Fr. Bz. B.
salignus, Fr. B.
hispidus, Fr. B. Sib. T.
spumens, Fr. T.
ignarius, Fr. Sib. B.
salicinus, Fr. Sib.
ulmarius, Fr. T.
annosus, Fr. T.
versicolor, Fr. T.
Medulla-panis, Fr. B. Sib.
Molluscus, Fr. B.
Trametes gibbosa, Fr. T.
suaveolens, Fr. B.
Dædalea quercina, P. B.
unicolor, Fr. Sib. B.
biennis, B.
Merulius corium, Fr. B.
lachrymans, Fr. B. Bz. T.
Fistulina hepatica, L. Sib. B. T.
D.
Hydnum repandum, L. Sib. B. T.
aurisculpium, L. Sib. B. T.
membranaceum, Bull.
Craterellus cornucopioides, Fr.
Sib. T.
Thelephora palmata, Fr. B. T.
Stereum purpureum, Fr. B. Bz.
hirsutum, Fr. B. Bz.
sanguinolentum, Fr. B.
Hymenochaete rubiginosa, Leo. Sib.
Bz.
tabacina, Leo. Bz.
Auricularia mesenterica, Bull. Sib.
B.
Corticium cæruleum, Fr. B.
- Corticium quercinum*, P. Sib.
incarnatum, Fr. B.
lacteum, Fr. Bz.
Clavaria rugosa, Bull. T.
abietina, Sch. (!) T.
fastigiata, D C. B.
muscoides, L. Sib. B. Bz.
cristata, Holms. B.
fragilis, Holms. Sib.
vermiculata, Scop. B.
fusiformis, Sow. T.
pistillaris, L. Sib. Bz. T.
acuta, Sow. Sib.
Ardenia, Sow. T.
Kunzei, Fr. T.
botrytis, P. T.
coralloides, L. Bz. Sib.
inæqualis, Müll. Sib.
Calocera cornea, Fr. Bz. B. T.
Typhula gyrans, Fr. B.
Tremella mesenterica, Retz. Sib.
Bz. B. T.
albida, Huds. Bz. Sib. T.
Sabinae (!) Bz.
foliacea, P. B.
Exidea glandulosa, Fr. B. Bz.
Hirneola Auricula Judæ, Berk.
Sib.
Namateila encephala, Fr. B.
Dacrymyces stillatus, Nees. Sib.
B.
chrysocomus, Tul. Bz. B. Sib.
Phallus impudicus, L. Bz. B. T.
D.
Geaster fimbriatus, Fr. B. T.
Bovista nigrescens, P. Sib. Bz. B.
D.
Lycoperdon giganteum, Batsch.
Bz. B. T.
pyriforme, Schöff. Bz. B. T.
gemmatum, Fr. B. D.
cælatum, Fr. B. D.
saccatum, Vahl. B.
Scleroderma vulgare, Fr. B.
verrucosum, Pers. Bz. B. Sib.
Lycogala epidendrum, Fr. B.
Reticularia umbrina, Fr. B.
Æthidium vaporarium, Fr. Bz.
Spumaria alba, D C. Bz. B.
Physarum album, Fr. Bz.
Craterium leucocephalum, Dit. B.
Stemonitis fusca, Roth. B.
Arcyria nutans, Fr. B.

Arcyria punicea, P. Bz. B.
Trichia chrysosperma, D C. B.
Ayresii, B. & Br. Ayres.
fallax, P. Bz.
turbinata, With. B. Sib.
Cyathus striatus, Hoff. Sib. Bz.
 B. T.
vernicosus, D C. Sib. B. Bz.
 Ogle.
Crucibulum vulgare, Tul. Bz. Sib.
Leptostroma spireæ, Fr. Bz. B.
Sphaeropsis taxi, Berk. Bz. B.
Acospermum compressum, Tode.
 Bz.
Diplodia ilicis, Curr. Bz.
Ascochyta dianthi, Berk. B.
Asteroma prunellæ, Purt. Bz.
Ceuthospori lauri, Grev. B. Bz.
Phragmidium mucronatum, Link.
 Bz. B.
gracile, Grev. Bz. B.
bulbosum, Schl. Bz. B.
obtusum, Link. Bz. B.
Triphragmium ulmaricæ, Link. Bz.
 B.
Puccinia graminis, Pers. Bz. B.
 T.
polygonorum, Link. Bz. B.
menthæ, Pers. Bz. B.
compositarum, Sch. D.
ægopodii, Link. Bz. B.
anemones, Pers. Dill. B. Bz.
 D.
epilobii, D C. B.
pulverulenta, Grev. Bz. B.
prunorum, Link. Bz. B.
umbelliferarum, D C. Bz. B.
lychnidearum, Link. Bz. B.
glomerata, Grev. Bz. B.
circeæ, Pers. Bz.
saniculæ, Grev. Bz.
heraclei, Link. Bz.
Violarum, Link. Bz.
glechomatis, D C. Bz.
betonicæ, D C. Bz. D.
Podisoma juniperi, Fr. B.
Tilletia caries, Tul. B. D.
Ustilago carbo, Tul. Bz. B. T. D.
urceolorum, Tul. D.
antherarum, Fr. Bz. B. D.
Uromyces concentrica, Lev. Bz. B. D.
apiculosa, Lev. B.
alliorum, D C. Bz.

Coleosporium tussilaginis, Lev. B.
pingue, Lev. B.
petasitis, Lev. Bz.
campanulæ, Lev. Bz. B.
sonchi-arvensis, Lev. Bz. D.
rhinanthacearum, Lev. Bz.
 B.
Melampsora salicina, Lev. B. D.
betulina, Des. D.
populina, Lev. B.
euphorbiæ, Cast. B.
Uredo potentillarum, D C. Bz. B.
saxifragarum, D C. Aplin.
pustulata, Pers. B.
confluens, D C. Bz. B.
bifrons, Grev. Bz.
hypericorum, D C. Bz.
Trichobasis symphyti, Lev. Bz. B.
 D.
petroselinæ, B. Bz. B.
oblongata, B. Bz. B. D.
betæ, Lev. Bz.
suaveolens, Lev. Bz. B. D.
Lecythea hirta, Lev. Bz. B.
saliceti, Lev. Bz. B. D.
valerianæ, Berk. Bz. B.
Ræstelia lacerata, Tul. Bz. B.
Æcidium leucospermum, D C. Bz. B.
epilobii, D C. Bz. B.
albescens, Grev. Bz. D.
euphorbiæ, Pers. Bz.
berberidis, Pers. Bz. B.
crassum, Pers. B.
ranunculacearum, D C. Bz. B.
bunii, D C. Bz.
asperifolii, Pers. Bz.
grossulariæ, D C. Bz. B.
urticæ, D C. Bz. B.
behenis, D C. Bz.
compositarum, Mart. Bz. B.
 var. *tussilaginis*. Bz.
 var. *prenanthis*. Bz.
violæ, Sch. Bz. B.
menthæ, D C. Bz.
primulæ, D C. B. D.
rubellum, D C. B.
ari, Berk. Bz.
quadrifidum, D C. Bz.
Endophyllum sempervivi, Lev. B.
Pachnocybe subulata, Berk. B.
Tubercularia granulosa, P. Bz.
Helminthosporium macrocarpum,
 Grev. Bz.

Helminthosporium velutinum, Lk.
Bz.

Polythrincium trifolii, Kze. Bz.

Cladosporium herbarum, Lk. B.

Aspergillus glaucus, Lk. Sib. B.
D.

candidus, Lk. Sib. B. D.

Peronospora viciae, Berk. B.

parasitica, Pers. Bz. B.

infestans, Mont. D.

Haplaria grisea, Lk. B.

Penicillium crustaceum, Fr. Bz.
B.

Oidium fructigenum, Schr. B.

Lasmodium cellare, Fr. Bz. B. D.

Ascophora mucedo, Tode. Bz.

Mucor mucedo, L. Sib. B.

caninus, P. Bz.

fusiger, Lk. B.

Pilobolus crystallinus, Tode. Bz.
B.

roridus, Sch. Bz. B. Sib.

Saprolegnia ferox, Kütz. D.

Sphaerotheca pamosa, Lev. Bz.

Phyllactinia guttata, Lev. Bz.

Uncinula adunca, Lev. Bz.

Microsphaeria penicillata, Lev.
Bz.

cornata, Lev. Bz.

Erysiphe communis, Schl. Bz. B.

lamprocarpa, Lev. Bz.

Chaetomium elatum, Kze. B.

Eurotium herbariorum, Lk. Bz.

Morchella esculenta, P. B. T. D.

semilibera, DC. B.

Helvella crispa, Fr. B. T.

lacunosa, Afz. B. T.

Spathularia flavida, Pers. T.

Leotia lubrica, P. Bz. T.

Geoglossum glabrum, P. Sib. Bz.

Peziza granulata, Bull. B.

firma, P. Bz.

stercorea, P. B.

inflexa, Bolt. Bz.

virginica, Batsch. Bz. B.

calycina, Sch. B.

villosa, P. Bz. B.

nivea, Dict. Sib.

cinerea, Batsch. Bz. B. Sib.

vesiculosa, Bull. Sib. Bz. B.

hemisphaerica, Wigg. B.

bicolor, Bull. Bz.

episphaeria, Mart. B.

Peziza Schumacheri, Fr. B.

cyathoidea, Bull. B.

leucoloma, Rob. B.

pineti, Batsch. B.

sulphurea, P. B.

rutilans, Fr. B.

cochleata, Hud. Sib. Bz. B.

caesia, P. B.

coccinea, Jacq. Bz. B. Sib.

hepatica, Batsch. Sib.

fusarioides, Berk. Bz. B.

aurantia, Fr. Sib. Bz. B.

macropus, P. Bz.

tuberosa, Bull. Bz.

scutellata, L. Bz. Sib.

Helotium herbarum, Fr. B.

virgultorum, Fr. Bz. Sib.

calyculus, Fr. Bz. Sib.

ceruginosum, Fr. Bz.

citrinum, Fr. Sib.

Cenangium prunastri, Fr. Bz.

Ascobolus furfuraceus, P. Bz.
Sib.

Bulgaria sarcoides, Fr. T.

inquinans, Fr. Bz. Sib.

Stictis radiata, P. Bz. B.

Tuber aestivum, Vitt. B. Bz.

Phacidium coronatum, Fr. Bz. B.

dentatum, Fr. Bz. B.

ilicis, Fr. Bz.

Heterosphaeria patella, Grev. B.
Bz.

Rhytisma salicinum, Fr. Bz. B.

acerinum, Fr. Bz. B. D.

maximum, Fr. Bz.

urticae, Fr. Bz.

Hysterium pulicare, P. Bz. B.

fraxini, P. Bz. B.

lineare, Fr. Bz. B.

conigenum, Fr. B.

virgultorum, DC. Bz. B.

arundinaceum, Sch. B.

juniperinum, De Not. Bz.

hederæ, De Not. Bz.

Colpoma quercinum, W. Bz. B.

Stegia ilicis, Fr. Bz. D.

Trochila craterium, Fr. B. Bz.

Torrubia militaris, Fr. Bz. B. T.
D.

Claviceps purpurea, Tul. D.

Epichloe typhina, Berk. Bz. T.

Hypomyces aurantius, Tul. Ayrea.

Nectria cinnabarina, Fr. Bz. B.

- Nectria coccinea*, Fr. Bz. B.
sanguinea, Fr. Bz. B.
episphearia, Fr. B.
Xylaria polymorpha, Grev. Bz. B.
 T.
 hypoxylon, Grev. Bz. B. T.
 carpophila, Fr. Bz. B. Ayres.
 digitata, Grev. Bz.
Poronia punctata, Fr. Bz.
Ustilina vulgaris, Tul. Bz. B.
Hypoxylon fuscum, Fr. Bz. B.
 concentricum, Grev. Bz.
Eutypa flavo-virens, Tul. Bz. B.
 Acharii, Tul. B.
Melogramma Bulhardi, Tul. Bz.
 gastrinum, Tul. Bz.
Polystigma rubrum, P. Bz. D.
Dothidea ulmi, Fr. Bz.
 betulina, Fr. Bz. D.
 heraclei, Fr. Bz.
 junci, Fr. Bz.
 pteridis, Fr. Bz.
 ribesia, P. B. Bz.
 rosa, Fr. B.
 striaeformis, Fr. Bz. B.
 filicina, Fr. Bz.
Diatrype quercina, Tul. Bz.
 aspera, Fr. B.
 stigma, Fr. Bz. B.
 disciformis, Fr. Bz. B.
 bullata, Fr. Bz.
- Diatrype undulata*, Fr. Bz. B.
Melanconis longipes, Tul. B.
 Berkelœi, Tul. B.
Valsa prunastri, Fr. Bz. B.
 nivea, Fr. Bz. B.
 coronata, Fr. Bz.
 turgida, Fr. Bz.
 salicina, Fr. Bz.
Cucurbitaria laburni, De Not. Bz.
 B.
 populina, Fr. Bz.
Massaria inquinans, Tode. Bz.
Sphaeria aquila, Fr. Bz. B.
 bombarda, Batsch. B.
 spermoides, Hoff. B. Bz.
 acuta, Mong. Bz. B.
 doliolum, P. Bz. B.
 herbarum, P. Bz. B.
 arundinacea, Sow. Bz.
 ovina, P. Bz.
 pulvis-pyrius, P. Bz.
 millepunctata, Grev. Bz.
Sphaerella rusoi, De Not. Bz. D.
 punctiformis, P. Bz.
 carpinea, Fr. Bz.
Stigmatea gerani, Fr. Bz.
 potentillæ, Fr. Bz.
 Robertiani, Fr. Bz.
Hypospila populina, Fr. B.
Isothea saligna, B. Bz.

LICHENS.

Leighton's Lichen Flora of Great Britain, *L.* Baxter's MSS., *Bz.* Sibthorp's Flora, *Sib.* Beesley's Banbury List, *B.* Dillenius, *Dill.*

- Collema furvum*, Ach. *Dill.* 1741.
pulposum, Bern.
crispum, Huds. *B.*
fasciculare, *L.* *Dill.* 1741.
nigrescens, Huds. *Sib.* *B.*
Leptogium lacerum, Ach. *Sib.*
Colicium hyperellum, Ach. *B.*
trachelinum, Ach. *L.*
curtum, Borr. *B.*
Boomyces rufus, D C. *Bz.*
Cladonia pyxidata, Fr. *B.*
furcata, Hff. *Sib.* *Bz.*
cornucopioides, Fr. *Sib.* *Bz.*
Parmelia Borreri, Turn. *L.*
fuliginosa, Dub. *B.*
conspersa, Ehrh. *B.*
saxatilis, *L.* *Bz.*
Physia flavicans, Lw. *B.*
parietina, *L.* *Sib.* *B.*
var. polycarpa, Ehrh. *Purt.*
ciliaris, *L.* *Sib.* *B.*
pulverulenta, Schreb. *B.*
f. pityrea, Ach. *Bz.*
f. venusta, Ach. *Sib.*
f. virella, Ach. *Bz.*
stellaris, *L.* *Sib.* *B.*
tenella, Scop. *Sib.* *B.*
Pannaria nigra, Huds. *B.*
Squamaria saxicola, Poll. *Sib.*
Placodium murorum, Hff. *B.*
Lecanora vitellina, Ach. *Sib.* *B.*
candelaria, Ach. *Sib.* *B.*
glauocarpa, Wh.
f. pruinosa. *L.*
atra, Hud. *Sib.*
symmicta, Ach. *L.*
expallens, Ach. *L.*
parella, *L.* *B.*
f. pallescens. *B.*
f. calva. *Bz.*
- Cladina sylvatica*, Hff. *Sib.*
rangiferina, Hff. *B.*
Usnea plicata, Fr. *B.*
articulata, Ach. *Bobart.*
Evernia prunastri, *L.* *B.*
Ramalina farinacea, *L.* *B.*
frazinea, *L.* *B.*
fastigiata, P. *B.*
pollinaria, Ach. *B.*
Solorina saccata, *L.* *Bz.*
Sticta pulmonaria, Ach. *B.*
Parmelia caperata, *L.* *Sib.*
physodes, *L.* *Sib.*
perlata, *L.* *Dill.*
Lecanora glaucoma, Hff. *B.*
aurantiaca, Leight. *L.*
ferruginea, Hud. *B.*
pyracea, Ach. *f. ulmicola*. *L.*
sophodes, Ach. *f. exigua*. *L.*
Pertusaria communis, D C. *Purton.*
fallax, P. *B.*
faginea, *L.* *B.*
globulifera, Turn. *B.*
Thelotrema lepadinum, Ach. *B.*
Urceolaria semposa, *L.* *B.*
Lecidea vernalis, *L.* *B.*
quernea, D. *B.*
parasema, Ach. *B.*
f. elaeochroma. *L.*
canescens, D. *B.*
Lightfootii, Sm. *L.*
denigrata, Fr. *L.*
anomala, Fr. *Brayne.*
albo atra, Hff. *L.* *B.*
melæna, Nyl. *L.*
phacodes, K. *f. chlorotica*. *L.*
sabuletorum, Flk. *L.*
rubella, Ehrh. *L.*
cupularis, Ehrh. *Bz.*
tantilla, Nyl. *L.*

Lecidea parasitica, Flk. B.
Opegrapha herpetica, Ach. Bz.
 f. rubella. L.
 atra, P. B.
 Turneri, Leight. L.
 varia, P. B.
 f. tigrina. L.
 vulgata, Ach. B.
Arthronia astroidea, Ach. B.
 swartziana, Ach. B.
Graphis elegans, Sm. Bz.
 scripta, Ach. B.
 f. diffusa. L.

Graphis scripta, f. flexuosa. L. Bz.
 f. divaricata. Bz.
 f. eutypa. Bz.
 inusta, Ach. Bz.
Endocarpon miniatum, L. B.
Verrucaria nigrescens, P. B.
 glaucina, Ach. L.
 viridula, Sch. L.
 rupestris, Sch. B.
 epidermidis, Ach. B.
 cinerea, P. B.
 nitida, W. Bz.

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ADDITIONS, CORRECTIONS, ETC.

- Page 1, l. 2, for Jus. read Juss.; l. 5, for plate i. vol. i. p. 2 read vol. i. p. 2, plate i.
- „ 2, l. 3, for 1. 9. 9 read 1. 10. 9.
- „ 3, l. 20, for 'anemonea' read 'anemones.'
- „ 6, l. 42, for 32. 28 read 33. 29.
- „ 8, l. 24, for 27 read 37.
- „ 11, l. 5, insert—Syme, E. B. i. 20. 18; l. 21, for part read pond.
- „ 15, l. 33, for 64 read 70.
- „ 16, After Berberis, insert—*Mahonia aquifolia* planted in parks, coppices, etc. Alien.
- „ 23, l. 18, for *Præcox* read *præcox*; l. 19, for 174. 123 read 175. 124.
- „ 26, l. 25, for 150. 109 read 158. 119.
- „ 27, l. 15, for 112 read 111.
- „ 28, insert after *Dentaria* notice—*Malcolmia maritima*, Br. Alien. Garden outcast on waste ground near Tennis Courts, Oxford, 1885.
- „ 29, l. 19, for 103 read 101.
- „ 30, l. 38, for 140 read 135.
- „ 31, l. 15, prefix an asterisk to *B. campestris*; l. 24, for R read B.
- „ 32, Mr. F. T. Richards believes he has seen *Diplotaxis tenuifolia* about Holywell Church.
- „ 33, l. 4, prefix an asterisk to *C. Armoracia*.
- „ 36, The plate in Syme, E. B. vol. i. no. 145 is E. B. 2354 unaltered.
- „ 43, l. 10, for 17 read 170.
- „ 44, l. 3, for 'Sagoti' read 'sagoti'; l. 28 for 4. 565 read iv. 86. 565.
- „ 46, l. 27, for Burfield read Binfield; l. 31, for *Segetum* read *segetum*.
- „ 50, l. 13, for *Cæsius* read *cæsius*. The drawing of *Dianthus Armeria* in the British Museum, referred to on l. 23, takes precedence of Sibthorp's record, as it was made by G. D. Ehret from a Shiplake specimen gathered in 1762. Ehret was employed in the Oxford Garden in 1750.
- „ 55, l. 42, for 118. 246 read 125. 251.
- „ 56, l. 34, for 125. 251 read 118. 246.
- „ 57, l. 13, after ii. insert—120; l. 39, after ii. insert—129.
- „ 58, l. 9, for 194 read 184.
- „ 60, l. 6, for 283 read 281.
- „ 61, l. 2, for 178 read 176.
- „ 62, l. 6, for 178 read 158; l. 41, for 187 read 157.
- „ 64, l. 10, for Wood read Wort.
- „ 66, l. 23, for *Phæum* read *phæum*.

- Page 67, l. 10, for 302 read 303.
 „ 68, l. 14, for 177 read 197.
 „ 69, l. 30, for *robertianum* read *Robertianum*.
 „ 73, l. 22, for 9. 328 read 11. 329.
 „ 74, l. 31, for 15. 330 read 16. 331.
 „ 82, l. 41, for 378 read 368.
 „ 84, l. 7, for 375 read 377.
 „ 87, l. 37, '*orobus*' etc. should come at end of line 38.
 „ 89, l. 20, V. Bobartii is figured in Syme, vol. iii. no. 394, add
 l. Stour. Tadmarton.
 „ 91, l. 30, for '*cerasus*' read '*Cerasus*'.
 „ 92, l. 32, for *fruticans* read *fruticans*.
 „ 93, l. 2, for *ulmaria* read *Ulmaria*; l. 11, for *alipendula* read
Filipendula; l. 12, after iii. insert—416; l. 42, for 168 read
 160.
 „ 94, Since I wrote the account of the Fruticose Rubi, Mr. J. G.
 Baker has published a very valuable paper in the Journ. Bot.,
 Jan., Feb., Mar., 1886, on the British Rubi and their relation to
 the Continental types. The results of his investigations show
 that the British plants:—*plicatus*, *rhamnifolius*, *villcaulis*, *macro-*
phyllus, *Sprengelii*, *leucostachys* (*vestitus*), *infestus*, *Radula*,
Koehleri, *hystrix*, *roseus*, *hirtus*, *Bellardi* are identical with
 the German Types. But that in Britain we have been using the
 names of the *Rubi Germanici* in a wrong sense for *affinis*, *cordi-*
folius, *carpinifolius*, *discolor*, *Grabowskii*, *thyrsoides*, *Lejeunii*,
foliosus, *rudis*, *fuscoater*, *scaber*, *pallidus*, *Guntheri*, *humifusus*.
 l. 28, for now read non.
 „ 95, The variety *cordifolius* of *R. rhamnifolius* is identical, Mr.
 Baker says, with *R. Maasti*, Focke. The original *cordifolius* Dr.
 Focke looks upon as a rare endemic German type; l. 15, *E. discolor*
 of Bab. is not the plant so named in *Rubi Germ.* Our British
 plant is *R. ulmifolius*, Schott; l. 21, *E. thyrsoides*, W. This
 again does not agree with German types. Dr. Focke refers our
 plant to *R. pubescens*, W. and N., see *Rubi Germ.* t. 16.
 „ 96, *E. carpinifolius*, W. and N. does not agree with Continental
 types, our plant may be *R. montanus*, Wirt.; l. 28, Mr. J. G.
 Baker would give subspecific rank to *R. umbrosus*, Arrh., and
 place it between *macrophyllus* and *rhamnifolius*, and to *R. cal-*
vatus he would give the same grade and place it between *villi-*
caulis and *rhamnifolius*.
 „ 97, l. 1, Mr. Baker would give the preference to Bloxam's name
 of *R. mucronatus*; l. 13, this is not the German Rubi *scaber*,
 but according to Mr. Baker, *E. Babingtonii*, Salt.; l. 19, the
 English *rudis* widely differs from the German type. Our plant
 which is closely allied to *Radula* is probably *R. echinatus*, Lindl.;
 l. 35, for *radula* read *Radula*.
 „ 98, l. 21, our *pallidus* is possibly shade grown *Koehleri*, it is allied
 to *apricus*, Wimm; l. 40, our *fusco-ater* does not agree with
 German type. It may be the *E. badius*, Focke.
 „ 99, l. 3, our *E. Guntheri* is identical with *R. saltrum*, Focke. It
 should be called by the earlier name of *E. flexuosus*, Mull. and
Lefev.; l. 11, *E. glandulosus*, Bell, is probably identical with
E. Bellardi, W. and N.
 „ 101, l. 3, enclose the account of *Comarum* in brackets as there is no

authentic Oxford record. The Rev. E. Fox believes he has seen it by the Cherwell; l. 11, for 148. 432 read 149. 433.

Page 102, l. 8, for *tormentilla* read *Tormentilla*; l. 9, for 144 read 146; l. 28, for *fragariastrum* read *Fragariastrum*.

„ 109, l. 24, for *Cinnamomea* read *cinnamomea*.

„ 111, l. 14, for Hook, J. read Hook, fil.

„ 114, l. 23, for 335 read 235.

„ 116, l. 28, for 489 read 498.

„ 118, l. 1, add—near Keble College, 1885; l. 14, for 11 read 18.

„ 119, l. 25, for 524 read 514.

„ 120, l. 32, for *acquatica* read *aquatica*.

„ 121, l. 31, for 273 read 1273; l. 39, insert—6. Thame, near Dorchester.

„ 122, l. 11, for vii. read viii.; l. 27, for *salicaria* read *Salicaria*.

„ 123, l. 2, for 38 read 3; l. 28, for *portula* read *Portula*.

„ 124, l. 21, to 1175 add—and 1174; l. 39, for *umbilicus* read *Umbilicus*.

„ 127, l. 10, for *Muscosa* read *muscosa*.

„ 128, l. 31, for *SAXIFRAGA* read *SAXIFRAGA*.

„ 130, l. 5, for *carota* read *Carota*; l. 12, after iv. insert—160; l. 28, for *anthriscus* read *Anthriscus*.

„ 132, l. 4, for *sphondylium* read *Sphondylium*.

„ 133, l. 26, for *cynapium* read *Cynapium*; l. 31, for *phellandrium* read *Phellandrium*.

„ 137, l. 14, for *pecten* read *Pecten*; l. 21, for 133 read 113.

„ 138, l. 20, for 588 read 538; l. 38, for *amomum* read *Amomum*.

„ 139, l. 40, for 584 read 586.

„ 140, l. 28, for 1116 read 111; l. 34, for 579 read 577.

„ 141, l. 28, for *sylvaticus* read *maritimus*.

„ 143, l. 21, insert—Syme, E. B. iv. 177. 631.

„ 144, l. 10, for *helix* read *Helix*.

„ 148, l. 10, for *Molugo* read *Mollugo*.

„ 152, l. 14, for 331 read 231.

„ 157, l. 19, for 772 read 762.

„ 158. *S. squalidus*, L. should have an asterisk prefixed; add

Var. *a. incisus*, Gussone. *S. glaber*, Reusch.

S. squalidus, L. Quoad specimina circa Oxford provenientia, et ab amico Woods communicata, 'foliis crassiusculis inciso-serratis, inferioribus petiolatis oblongis, superioribus lanceolato-oblongis cordato-amplexicaulibus subauriculatis.' This occurs on waste ground about Oxford.

Var. *b. chrysanthemifolius*, Guss., is the common plant on walls at Oxford; this is distinguished by the 'caule basi suffruticoso ramosissimo, foliis tenuibus 1-2 pinnatifidis, laciniis distantibus anguste linearibus denticulatis integrisve margine subrevolutis,' but Gussone says it is not the plant of Hb. Banks. The form *bb* 'foliorum laciniis distantibus' also occurs. The var. *b*, Gussone states recedes towards var. *a*, to which perhaps it belongs. He also says that a specimen from the Oxford garden is the var. *c. microglossus*, and is scarcely distinguishable. The Oxford plant is referred by De Candolle in the *Prodromus* to var. *Intilobus*, DC., which variety is placed under *S. vernalis*, W. and K. by Boissier. Probably Mr. Dyer's 'parviflorus' belongs here. Var. *hybrida*. *S. squalidus* × *vulgaris*. Mr. Groves coincides

with me in considering some specimens of *Senecio* gathered about Oxford to be natural hybrids of *squalidus* and *vulgaris*. They were found on waste ground near Folly Bridge and near the Tennis Courts.

Page 159. *Senecio crassifolius*, W. At Florence I went over this rather puzzling genus with Mr. Groves. He was quite convinced that our plant is identical with Continental *crassifolius*. Gussone in *Floræ Siculæ* says that Moretti does not separate *crassifolius* from *leucanthemifolius*, and Boissier under the latter name includes *crassifolius*, to which there is no doubt it is closely allied, the linear spatulate leaves being the chief point of difference.

„ 160. *S. vernalis*, W. and K. should have an asterisk prefixed, and casual would perhaps better describe its occurrence here. The specimens agreed with a plant so named by Dr. Boswell, but I have not seen authentic Continental specimens. Our plants appear to be closely allied to *leucanthemifolius*, but have a more erect habit. Boissier in *Flor. Orient.* asserts that *vernalis* has been frequently distributed under the name of *vernus* and *crassifolius*.

Our Oxford *Senecios* are :—

S. crassifolius, W. !

S. squalidus, L. !

Var. a. *incisus*, Guss. !

Var. b. *chrysanthemifolius*, Guss. !

! Var. c. *microglossus*. ! *parviflorus*, Dyer.

Var. *hybrida* = *vulgaris* × *squalidus*. !

S. vernalis, W. and N. ?

And probably *S. leucanthemifolius*, Poir.

I cannot help believing that all these with *vernus*, Biv., *incrassatus*, Guss., *apulus*, Ten., and *humilis*, Def., are hybrids of *vulgaris* and *squalidus*. It is not a little singular that when growing on walls in the absence of *vulgaris*, *squalidus* is fairly constant, but on waste ground where both species occur, there is extreme latitude in variation.

„ 161, l. 38, for 727 read 730.

„ 166, l. 8, for 337 read 737.

„ 168, l. 33, for 776 read 770.

„ 170, l. 11, *Tussilago hybrida* is figured in Syme, E. B. plate 784. It is cultivated in the Botanical Garden.

„ 171, l. 18 for 701 read 700.

„ 181, l. 5, Mr. Boswell believes he has seen the true *murorum* in Shotover Plantations.

„ 187, l. 10, for 8 read 10.

„ 188, l. 20, for 11. 869 read 15. 873. W. G. P. the recorder of *C. patula* is, the Rev. F. Bennett informs me, Sir W. G. Phillimore.

„ 191, l. 5, for 870 read 879.

„ 199, l. 25, for 929 read 928.

„ 200, l. 9, *Borago* should have an asterisk attached ; l. 35, for 1116 read 1115.

„ 203, l. 16, for 92 read 96.

„ 205, l. 14, for 118 read 107.

„ 208, l. 36, prefix asterisk to *S. melanocerasum*.

„ 215, l. 35, *Elatine* should be spelled as Miller wrote it, *Elatina*.

„ 219, l. 2, for Sen. read Ten.

- Page 220, l. 20, for 992 read 991.
 „ 222, l. 14, for 1004 read 1002.
 „ 224, l. 3, for 1017 read 1018.
 „ 225, l. 32, for 'purpurea' read 'purpurea.'
 „ 228, l. 6, for 94 read 74; l. 24 for 1073 read 1074.
 „ 229. The cleistogamous form of *L. amplexicaule* is as Mr. F. T. Richards points out, the common plant of wall-tops about Oxford.
 „ 231, l. 2, for which includes read we have.
 „ 235, l. 21, add—Syme, E. B. vii. 37. 1053.
 „ 236, l. 5, in Sherard's European collection there is a specimen which would take priority of Sibthorp's record but it is without date or locality except Oxon.
 „ 247, l. 2, for 160 read 170; l. 15, for 1165 read 1163; l. 34, for 17 read 174.
 „ 248, l. 29, for 'Botryoides' read 'botryoides.'
 „ 250, l. 29, for 1185 read 1186; l. 38, for 1635 read 1185.
 „ 251, l. 33, add—Syme, E. B. viii. 31. 1204.
 „ 252, l. 8, for iv. 8 read viii. 4.
 „ 257, l. 5, for 1251 read 1237.
 „ 261, l. 8, for *helioscopia* read *Helioscopia*; l. 34, add—1262 at end.
 „ 262, l. 22, at Headington some plants of *Hippophae* in G. H. Morrell, Esq.'s grounds have sent rootlets under the wall from which young plants have sprung.
 „ 263, l. 33, for 1283 read 131. 1280.
 „ 265, l. 22, for 'structa' read 'stricta.'
 „ 266, l. 30, for 'Vesca' read 'vesca.'
 „ 269, l. 6, for 149 read 194.
 „ 272, l. 38, for 231 read 221.
 „ 275. *S. repens*, *L.* Mr. F. T. Richards has an impression he has seen it in Oxfordshire.
 „ 276, l. 3, for 1337 read 1338; l. 5, for 1336 read 1337.
 „ 281, l. 11, for 71 read 68.
 „ 305, l. 10, for ix. 9. 1518 read ix. 187. 1518.
 „ 306. Insert three lines from bottom, under *Ornithogalum umbellatum*, 'Denizen. Orchards, plantations, damp fields. Rare. April-June.'
 „ 309, l. 17, for 1505 read 1535.
 „ 310, l. 11, for 1561 read 1560; l. 16, Messrs. Holliday and Boswell found *J. diffusus* in Bullington bog about 1870.
 „ 311, l. 5, for 1516 read 1567.
 „ 312, l. 2, for 1571 read 1576.
 „ 313, bottom line, for 1549 read 1551.
 „ 315, l. 7, for 17. 1394 read 21. 1395.
 „ 318, l. 38, for 1503 read 1533.
 „ 378, et seq. In the Botanical Garden Library are portraits in oil of Jacob Bobart, Jun., Rob. Morison, Dillenius, John Sibthorp, and Dr. Daubeney.
 „ 399. The names of Dr. Brayne who lived in the North of the County, and Dr. Woodward of Bicester, should be added to the list of Oxford workers. The latter was the finder of *Leucojum vernum*. He made an extensive collection of Oxfordshire plants which it is believed is still in existence.

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